



Coaxial Connectors Cable Assemblies



For over two decades,

Applied Engineering Products
has been at the leading edge of,
and a significant force in,
the subministure coaxial connector market.

Structured to Excellence

Our all new 40,000 square foot facility provides an ideal environment for business as well as abundant space for expansion. Fully climate controlled, all work areas are open and well provided with dedicated task lighting.

Our on-going assembly automation program allows quick and efficient response rates for increased production when needed in order to meet all customer production requirements.



Determining the customer's needs initiates the design process. . .



... and concepts are translated into hard numbers by our Engineering staff.



Hand machining expertise is critical to prototype creation. . .

SHOP AREA

Clean, comfortable work areas are laid out for maximum workflow efficiency. Subfloor electrical and compressed air supply lines, with outlets at each work station, eliminate unsightly and dangerous droplines.



But high volume production requires automation for maximum efficiencies.



Computerized test equipment is an integral part of our SPC program. . .



THE HUMAN ELEMENT

Even the best and most modern test and production equipment cannot perform to its potential if the critical human element is lacking. Although we consider our equipment list second to none, our most important asset is our highly trained staff of connector experts.

Our singleminded dedication to the task of supplying our customers with the finest subminiature coaxial connectors and cable assemblies, on time and at a competitive price, is what sets us apart from the crowd in connector suppliers.



And our electrical test equipment, such as the HP 8510 network analyzer, is useful for production testing of cable assemblies as well as for design analysis.



. . .as is our inspector and operator input.



Our DESC-approved laboratory is equipped to perform all mechanical and environmental testing per MIL-C-39012. . .



STATISTICAL PROCESS CONTROL

We began our companywide commitment to SPC in 1989, and are continuing to implement the program in all applicable areas. Computerized test input combined with in-process operator charting enables us to correct problems before they happen, thus ensuring efficient and costeffective production flow.

OUR PRODUCT LINE

Subminiature Coaxial Connectors:

- SMA Series (MIL-C-39012 QPL) SMB Series (MIL-C-39012 QPL) SMC Series (MIL-C-39012 QPL)
- SLB Series (Slide-on version of SMB) SSMB and SSMC 75 Ohm, Screw-on and Snap-on mating
- · Adapters Within and Between Series · Cable Terminations · Hermetic Seals for RF and Microwave Applications
- BNC, TNC, and N Series connectors specialized for use with miniature cables.

Coaxial Cable Assemblies:

Flexible, using any size cable from RG-178 to RG-214 and any connector series.
 Semi-rigid, sizes from .047" to .250" diameter, custom bent with any connectors and phase matching available.
 Semi-flexible, with 100% shielding and hand formability.

Our connectors and/or cable assemblies are qualified for, and used in, such programs as:

ARC-164, GRC-206, F-15 MSIP, MSC-64, REGENCY Net, SINCGARS, TRQ-32, JSTARS, T/CAS, GPS and MLS/MMLS.

We welcome customer surveys, whether it be for quality, capability, or oriented to engineering. We are proud of our record, we have passed surveys conducted by most major users of coaxial connectors, including:

Hughes Aircraft M/A Com Hewlett-Packard Rockwell Motorola Elisra

Harris Corp.

DESC
Raytheon
Magnavox
Westinghouse
Sanders Associates
Boeing
Teledyne

Allied Bendix ITT A/OD General Electric Loral Tektronix IFR AT&T



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contents

MIL-C-39012 QPL CONNECTORS	3
SMA SERIES6Specifications7Semi-rigid connectors12Flexible cable connectors18Panel (flange mount) receptacles23Bulkhead receptacles32Knurl mount receptacles34P.C. board receptacles35Stripline receptacles36Hermetic seal launchers37Adapters within series56	3 3 3 5 5 6 6 7
SMB SERIES58Specifications60Cable plugs63Cable jacks65Bulkhead receptacles67P.C. board receptacles69Panel (flange mount) receptacles70Stripline receptacles71Adapters within series72Resistive terminations73	3 5 7 9 1 2
SMC SERIES55Specifications60Cable plugs72Cable jacks75Bulkhead receptacles77P.C. board receptacles78Panel (flange mount) receptacles79Stripline receptacles80Adapters within series81Resistive terminations82	3 3 9 1
SLB SERIES59Specifications60Cable plugs83Cable jacks85Bulkhead receptacles87P.C. board receptacles89Float mount/blind mate connectors91	3 5 7
SSMB SERIES 98 Specifications 98 Cable plugs 100 Cable jacks 101	9

SSMB SERIES, continued	
Bulkhead receptacles	102
P.C. board receptacles	
Panel (flange mount) receptacles	
Adapters	
SSMC SERIES	98
Specifications	
Cable plugs	
Cable jacks	
Bulkhead receptacles	100
P.C. board receptacles	
Panel (flange mount) receptacles	110
Adapters	
SSLB SERIES	111
Specifications	aa
Cable plugs	112
Bulkhead receptacles	
P.C. board receptacles	
r.o. board receptacies	[] [
75 OHM SERIES	113
Specifications	
Screw-on Mating:	
Cable plugs	115
Cable jacks	116
Receptacles	117
Adapters and terminations	118
Snap-on Mating:	110
Cable plugs	119
Cable jacks	
Receptacles	121
Adapters and terminations	123
CABLE TERMINATIONS	124
ADAPTER BETWEEN SERIES	
SMB to SMC	127
BNC to subminiature	
N to subminiature	
TNC to subminiature	130
BNC CABLE CONNECTORS	404
BIVE CABLE CONNECTORS	131
TYPE N CABLE CONNECTORS	
Standard	132
Precision plugs and jacks	133
1 Toololol plugo and jacks	100
Contents Continued Next Page	
Contents Continued Next Fage	



CABLE ASSEMBLIES	135
Design considerations	136
Standard flexible assemblies	137
Standard semi-rigid assemblies	141
MOUNTING DIMENSIONS	
Connectors	143
Hermetic seals	
CABLE DATA	144
ASSEMBLY TOOLS	
SMA interface gages	147
Crimp tools	146
Torque wrenches	146
Capping tool for right angle	
cable connectors	146

ASSEMBLY INSTRUCTIONS.	148
CROSS REFERENCES	
Amphenol	165
Connecting Devices (CDI)	166
Omni-Spectra (OSM)	167
Sealectro	170
Solitron	174
INDEX BY AEP P/N	177

MIL-C-39012



Because of the changing nature and complexity of MIL specifications, it is difficult to include complete details of each QPL connector in a full-line catalogue. The connectors shown below are QPL as of the printing date; call for our QPL brochure for up-to-date listings and complete details. The page numbers shown are for the commercial connector closest in configuration to the QPL part.

SMA QPL connectors have passivated bodies and coupling nuts, except direct-solder plugs and jacks for semi-rigid cable. These items have gold plated bodies for solderability.

SMB and SMC QPL connectors have gold or silver plated bodies as indicated.

SMO

Straight plug for flexible cable Clamp type (Category A)			Pg.
With Without			
lockwire holes	lockwire holes	Cable	18
M39012/55-3006	M39012/55-3106	RG-178	
M39012/55-3007	M39012/55-3107	RG-316	
M39012/55-3008	M39012/55-3108	RG-122	
M39012/55-3009	M39012/55-3109	RG-58,142	
M39012/55-3010	M39012/55-3110	RG-303	

Straight plug for flexible cable Crimp type (Category C)			Pg.
With Without			
lockwire holes	lockwire holes	Cable	18
M39012/55-3025	M39012/55-3125	RG-178	
M39012/55-3026	M39012/55-3126	RG-316	
M39012/55-3027	M39012/55-3127	RG-122	
M39012/55-3028	M39012/55-3128	RG-142	
M39012/55-3029	M39012/55-3129	RG-58,303	

Bulkhead jack for flexible cable Clamp type (Category A)		Pg.
MIL P/N	Cable	21
M39012/59-3006	RG-178	
M39012/59-3007	RG-316	
M39012/59-3008	RG-122	
M39012/59-3009	RG-58,142	
M39012/59-3010	RG-303	

Flange mount panel receptacle Solder pot contact		Pg.
4-hole flange	2-hole flange	24
M39012/60-3001	M39012/60-3002	

Bulkhead receptacle Solder pot contact)	Pg.
Rear mount	Front mount	32
M39012/61-3001	M39012/61-3002	

Straight plug for semi-rigid cable Solder/clamp type (Category B)		Pg.
With		
lockwire wires	Cable	13
M39012/79B3003	RG-405	
M39012/79B3004	RG-402	
Without		
lockwire wires	Cable	
M39012/79B3103	RG-405	
M39012/79B3104	RG-402	

	Bulkhead jack for semi-rigid cable Solder/clamp type (Category B)		
	MIL P/N	Cable	16
Г	M39012/83B3003	RG-405	
	M39012/83B3004	RG-402	

Straight plug for .141" semi-rigid Direct solder (Category B)		
No contact or insulator		Pg.
With		
lockwire holes	Cable	12
M39012/92B3001	RG-402	
Without		
lockwire holes	Cable	
M39012/92B3101	RG-402	



Straight plug for f			
Clamp type (Cate	gory A)		Pg.
Gold Plated	Silver Plated	Cable	63
M39012/67-0003	M39012/67-0103	RG-178	
M39012/67-0004	M39012/67-0104	RG-316	

Bulkhead jack for flexible cable Clamp type (Category A)		Pg.	
Gold Plated	Silver Plated	Cable	66
M39012/70-0003	M39012/70-0103	RG-178	
M39012/70-0004	M39012/70-0104	RG-316	

Straight plug for flexible cable Crimp type (Category B)		Pg.	
Gold Plated	Silver Plated	Cable	63
M39012/67B0008	M39012/67B0013	RG-178	
M39012/67B0009	M39012/67B0014	RG-316	
M39012/67B0010	M39012/67B0015	RG-179	

Bulkhead jack for flexible cable Crimp type (Category B)		Pa.	
Gold Plated	Silver Plated	Cable	66
M39012/70B0008	M39012/70B0013	RG-178	
M39012/70B0009	M39012/70B0014	RG-316	
M39012/70B0010	M39012/70B0015	RG-179	

Straight jack for fluctional Clamp type (Cate)			Pg.
Gold Plated	Silver Plated	Cable	65
M39012/68-0003	M39012/68-0103	RG-178	
M39012/68-0004	M39012/68-0104	RG-316	

Rear mount bulkhead receptacle		
Solder pot contact	t	Pg.
Gold Plated	Silver Plated	67
M39012/71-0001	M39012/71-0003	

	aight jack for fl			Pg.
C	Gold Plated	Silver Plated	Cable	65
M39	012/68B0008	M39012/68B0013	RG-178	
M39	012/68B0009	M39012/68B0014	RG-316	
M39	012/68B0010	M39012/68B0015	RG-179	

Front mount bulkh	nead receptacle	
Solder pot contact		Pg.
Gold Plated	Silver Plated	67
M39012/71-0002	M39012/71-0004	

Right angle plug f			Pg.
Gold Plated	Silver Plated	Cable	63
M39012/69-0003	M39012/69-0103	RG-178	
M39012/69-0004	M39012/69-0104	RG-316	

Straight P.C. board receptacle		Pg.	
Gold Plated	Silver Plated	Leg Length	69
M39102/95-0001	M39012/95-0004	.155	
M39012/95-0002	M39012/95-0005	.125	
M39012/95-0003	M39012/95-0006	.093	

Right angle plug f Crimp type (Cated			Pa
Gold Plated	Silver Plated	Cable	63
M39012/69B0008	M39012/69B0013	RG-178	
M39012/69B0009	M39012/69B0014	RG-316	
M39012/69B0010	M39012/69B0015	RG-179	

Right angle P.C. board receptacle		Pg.	
Gold Plated	Silver Plated	Leg Length	69
M39102/96-0001	M39012/96-0004	.155	
M39012/96-0002	M39012/96-0005	.125	
M39012/96-0003	M39012/96-0006	.093	



smc

Straight plug for flexible cable Clamp type (Category A)			Pg.
Gold Plated	Silver Plated	Cable	74
M39012/73-0003	M39012/73-0103	RG-178	
M39012/73-0004	M39012/73-0104	BG-316	1

Bulkhead jack for flexible cable			
Clamp type (Category A)			Pg.
Gold Plated	Silver Plated	Cable	76
M39012/76-0003	M39012/76-0103	RG-178	
M39012/76-0004	M39012/76-0104	RG-316	

Straight plug for flexible cable Crimp type (Category B)			Pq.
Gold Plated Silver Plated Cable			74
M39012/73B0008	M39012/73B0013	RG-178	
M39012/73B0009	M39012/73B0014	RG-316	
M39012/73B0010	M39012/73B0015	RG-179	

Bulkhead jack for flexible cable			
Crimp type (Category B)			Pg.
Gold Plated Silver Plated Cable			76
M39012/76B0008	M39012/76B0014	RG-178	
M39012/76B0009	M39012/76B0015	RG-316	
M39012/76B0010	M39012/76B0016	RG-179	

Straight jack for flexible cable Clamp type (Category A)			Pg.
Gold Plated	Silver Plated	Cable	75
M39012/74-0003	M39012/74-0103	RG-178	
M39012/74-0004	M39012/74-0104	RG-316	

Rear mount bulkhead receptacle		
Solder pot contact		
Gold Plated Silver Plated		77
M39012/77-0001 M39012/77-0003		

Straight jack for flexible cable Crimp type (Category B)			Pg.
Gold Plated Silver Plated Cable			75
M39012/74B0008	M39012/74B0014	RG-178	
M39012/74B0009	M39012/74B0015	RG-316	
M39012/74B0010	M39012/74B0016	RG-179	

Front mount bulkhead receptacle		
Solder pot contact		
Gold Plated Silver Plated		77
M39012/77-0002 M39012/77-0004		

Right angle plug for flexible cable Clamp type (Category A)			Pa
Gold Plated Silver Plated Cable			74
M39012/75-0003	M39012/75-0103	RG-178	
M39012/75-0004	M39012/75-0104	RG-316	

Right angle plug for flexible cable Crimp type (Category B)			Pg.
Gold Plated Silver Plated Cable		74	
M39012/75B0008	M39012/75B0014	RG-178	
M39012/75B0009	M39012/75B0015	RG-316	
M39012/75B0010	M39012/75B0016	RG-179	



All AEP SMA series connectors meet or exceed MIL-C-39012 requirements, offering good electrical performance to 18 GHz. Our unique method of captivating contacts and insulators greatly reduces RF leakage by eliminating epoxy fill holes in the connector body (see page 11 for details).

Most of the items shown are available with either gold plated bodies or a less expensive finish (nickel plating or passivated finish); part numbers for each finish are shown in the product section. The coupling nuts of plug connectors are passivated in all cases.

Pages 8 through 10 show the various options for cable attachment types. Standard cables for use with AEP SMA connectors are shown at the bottom of the appropriate product pages. If you need an SMA for use with a cable other than those shown, please call for information. A complete listing of cable groups is on page 145.

The index listing for each connector shows the appropriate assembly instruction number and trim code; assembly instructions start on page 148.

Please call us if you don't see what you need—we have made hundreds of variations of the items shown here and can likely take care of your special connector requirements.

Factory-built cable assemblies using these connectors are available from AEP.

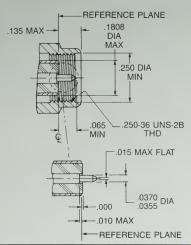
Each connector with a MIL-C-39012 QPL version available has the appropriate slash sheet noted. See page 3 for a complete listing of SMA QPL connectors.

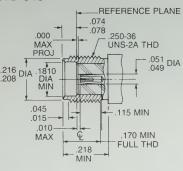




INTERFACE DIMENSIONS

PER MIL-STD-348





SPECIFICATIONS

MIL-C-39012C

Materials:

Body parts: Stainless steel per ASTM-A-582, type 303. Contacts: Beryllium copper per QQ-C-530, condition HT. Insulators: Teflon TFE per ASTM-D-1710. Gaskets: Silicone rubber per ZZ-R-765, class 2B, grade 65-75.

Finish:

Center contacts: Gold plate per MIL-G-45204 All other parts finished to meet MIL-C-39012 corrosion requirements.

Electrical:

Insulation resistance:

Greater than 5000 megohms.

Dielectric withstanding voltage:

Per MIL-STD-202, method 301.

RF highpot voltage:

335-675 VAC @ 5-7.5 MHz, dependent on cable type.

Contact resistance: 3 milliohms max.

RF leakage: -60 Db min, 2-3 GHz.

Insertion loss: .06 x F(GHz) max, test frequency 6 GHz.

VSWR (Straight cable plugs and jacks):

RG178: 1.20 + (.025xF[GHz]), DC-12.4 GHz.

RG316: 1.15 + (.020xF[GHz]), DC-12.4 GHz.

RG142: 1.15 + (.010xF[GHz]), DC-12.4 GHz.

RG402 (captive contact): 1.05 + (.001xF[GHz]),

DC-18 GHz.

RG402 (noncaptive contact): 1.05 + (.008xF[GHz]),

DC-18 GHz.

RG405 (captive contact): 1.07 + (.010xF[GHz]),

DC-18 GHz.

RG405 (noncaptive contact): 1.07 + (.008xF[GHz]), DC-18 GHz.

VSWR SPECIFICATIONS ARE NOT APPLICABLE TO NON-CABLED CONNECTORS.

Impedance: 50 ohms.

Frequency range: DC to 8, 12.4 or 18 GHz, dependent on cable type and configuration.

Mechanical:

Engage/disengage force: 2 pounds max.

Mating characteristics: Dimensions per above.

For female contacts (after 5 insertions of

.0375 dia pin, .040 min depth):

Insertion force with .037 min dia pin, 2 pounds max.

Withdrawal force for .0355 max dia pin, 1 ounce min. Contact retention (captive contact connectors):

6 pounds min axial force.

Durability: 500 mating cycles.

Environmental:

(per MIL-STD-202)

Vibration: Method 204, test condition D.

Mechanical shock: Method 213, condition I.

Thermal shock: Method 107, condition B.

Corrosion: Method 101, condition B, 5% salt solution.

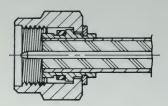
Moisture resistance: Method 106.

Corona level: Corona free @ 70,000 feet,

voltage dependent on cable size.

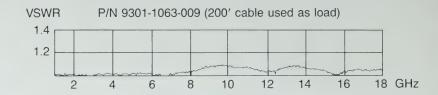
Temperature rating: -65°C to +165°C.

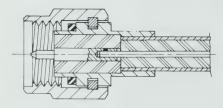




Direct Solder For Semi-Rigid Cable (Cable center conductor used as contact)

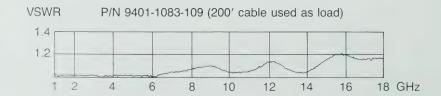
The use of this type of connector ensures the best possible electrical performance since there are no discontinuities introduced by a separate contact. It is best used in applications not requiring frequent mating and unmating, since the pointed center conductor will tend to shed metal chips when mated with an SMA female contact.





Direct Solder For Semi-Rigid Cable (Provided with contact and insulator)

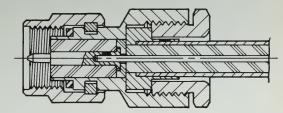
Although this type of connector will have slightly higher VSWR than when the center conductor is used as a contact, it does provide an outer conductor with no brass from the cable jacket exposed to the interface. This, combined with a center contact with a rounded point, ensures clean interfaces through many mating cycles.





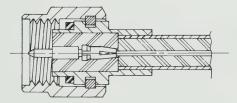
Solder-Clamp For Semi-Rigid Cable

This attachment method is most useful for right angle plugs and all bulkhead jacks. After the connector is assembled to the cable, it can be repositioned relative to the cable by loosening the clamp nut. When the proper orientation is reached, it can be held in the correct position by retightening the nut. Electrical performance is similar to direct-solder plugs with contacts.



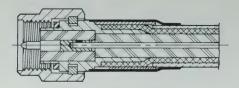
Direct Solder With Captive Contact For Semi-Rigid Cable

These connectors have electrical performance similar to types with noncaptive contacts, but assembly is much easier. The cable is simply stripped and inserted into the connector until it stops, and the jacket soldered to the body. The proper contact gap is automatically held, and no contact soldering is required.



CABLE ATTACHMENT METHODS

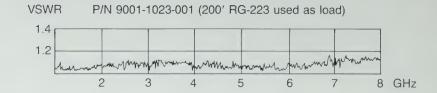


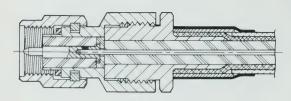


Crimp Type For Flexible Cable (Noncaptive contact)

This attachment method provides the best possible electrical performance with flexible cable, and is the easiest to assemble.

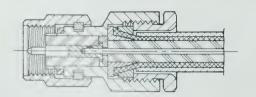
Solder-type connectors for flexible cable use this construction, but have a solder hole in the side of the sleeve for soldering the cable braid. We recommend against using this method, as the soldering heat damages the cable dielectric.





Crimp Type For Flexible Cable (Captive contact)

This attachment method mechanically captivates the center contact to eliminate movement during cable flexure or thermal stress.



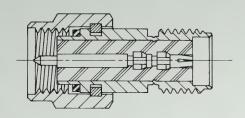
Clamp Type For Flexible Cable (Captive contact)

These connectors can be assembled without special tooling, and are field replaceable.

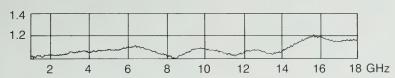
CAPTIVATION CAPTURE OF THE CAPTURE O

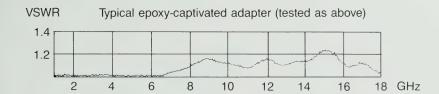
All AEP SMA receptacles and adapters use our unique mechanical captivation for contacts and insulators. This method provides retention strengths to meet MIL-C-39012 requirements, and eliminates RF leakage from epoxy fill holes.

The contact barbs and body staking are designed and located to provide electrical performance as good as or better than epoxy captivation. The test plots below illustrate the electrical performance of our captivation versus a typical epoxy-captivated adapter of the same configuration.

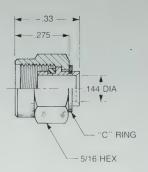


P/N 5916-1103-603 terminated with 9301-1063-009 on VSWR 200' .141 semi-rigid.









Straight Plug

- · Direct solder attachment
- · Retractable coupling nut
- · Cable center conductor used as contact

For .141" semi-rigid: 9301-1063-009 (Gold plated) 9301-7063-009 (Nickel plated)

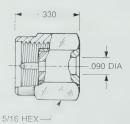
QPL version available (M39012/92)



Straight Plug

- Direct solder attachment
- · Retractable coupling nut
- · Cable center conductor used as contact
- Stepped body for use in applications requiring frequent mating and unmating

For .141" semi rigid: 9301-1063-109 (Gold plated) 9301-7063-109 (Nickel plated)



Straight Plug

- Direct solder attachment
- · Provided with contact and insulator
- Noncaptive contact
- Short body length allows very tight cable bend in dense packaging applications

For .085" semi-rigid: 9401-1083-210 (Gold plated) 9401-7083-210 (Nickel plated)

SEMI-RIGID CABLE PLUGS



Straight Plug

- · Direct solder attachment
- · Provided with contact and insulator
- Noncaptive contact

For .085'' semi-rigid (A = .089):

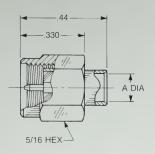
9401-1083-010 (Gold plated)

9401-7083-010 (Nickel plated)

For .141" semi-rigid (A = .144):

9401-1083-109 (Gold plated)

9401-7083-109 (Nickel plated)



Straight Plug

- · Direct solder attachment
- · Provided with contact and insulator
- · Captive contact for one-step cable assembly

For .085'' semi-rigid (A = .089):

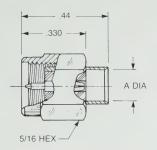
9401-1583-010 (Gold plated)

9401-7583-010 (Nickel plated)

For .141" semi-rigid (A = .144):

9401-1583-109 (Gold plated)

9401-7583-109 (Nickel plated)



Straight Plug

- Solder-clamp attachment
- Captive contact

For .085" semi-rigid:

9501-1593-010 (Gold plated)

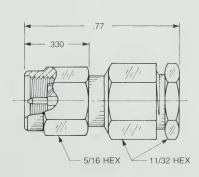
9501-9593-010 (Passivated)

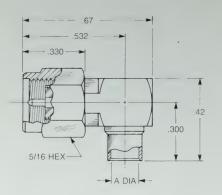
For .141" semi-rigid:

9501-1593-009 (Gold plated)

9501-9593-009 (Passivated)

QPL version available (M39012/79)



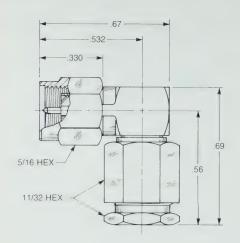


Right Angle Plug

· Direct solder attachment

For .085" semi-rigid (A = .089): 9443-1563-010 (Gold plated) 9443-7563-010 (Nickel plated)

For .141" semi-rigid (A = .144): 9443-1563-009 (Gold plated) 9443-7563-009 (Nickel plated)



Right Angle Plug

Solder-clamp attachment

For .085" semi-rigid: 9543-1593-010 (Gold plated) 9543-9593-010 (Passivated)

For .141" semi-rigid: 9543-1593-009 (Gold plated) 9543-9593-009 (Passivated)

SEMI-RIGID CABLE JACKS

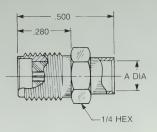


Straight Jack

- · Direct solder attachment
- Noncaptive contact

For .085" semi-rigid (A = .089): 9402-1083-010 (Gold plated) 9402-7083-010 (Nickel plated)

For .141" semi rigid (A = .144): 9402-1083-009 (Gold plated) 9402-7083-009 (Nickel plated)



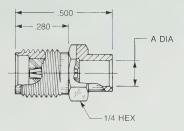
Straight Jack

- · Direct solder attachment
- · Captive contact for one-step cable assembly

For .085" semi-rigid (A = .089): **9402-1583-010** (Gold plated)

9402-7583-010 (Nickel plated)

For .141" semi-rigid (A = .144): 9402-1583-009 (Gold plated) 9402-7583-009 (Nickel plated)



Straight Jack

- · Solder-clamp attachment
- · Captive contact

For .085" semi-rigid:

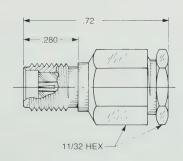
9502-1593-010 (Gold plated)

9502-9593-010 (Passivated)

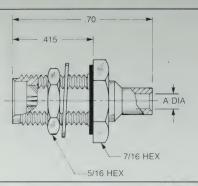
For .141" semi-rigid:

9502-1593-009 (Gold plated)

9502-9593-009 (Passivated)



smo

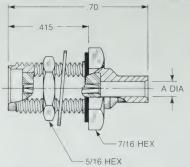


Straight Bulkhead Jack

- · Direct solder attachment
- · With mounting gasket
- Noncaptive contact

For .085" semi-rigid (A = .089) 9453-1083-010 (Gold plated) 9453-7083-010 (Nickel plated)

For .141" semi-rigid (A = .144): 9453-1083-009 (Gold plated) 9453-7083-009 (Nickel plated)

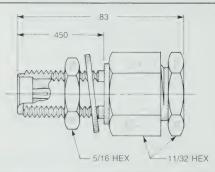


Straight Bulkhead Jack

- · Direct solder attachment
- With mounting gasket
- · Captive contact for one-step cable assembly

For .085" semi-rigid (A = .089): 9453-1583-010 (Gold plated) 9453-7583-010 (Nickel plated)

For .141" semi-rigid (A = .144): 9453-1583-009 (Gold plated) 9453-7583-009 (Nickel plated)



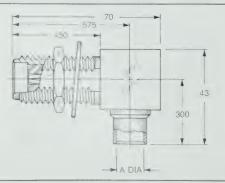
Straight Bulkhead Jack

- Solder-clamp attachment
- · Captive contact

For .085" semi-rigid: 9530-1593-010 (Gold plated) 9530-9593-010 (Passivated)

For .141" semi-rigid: 9530-1593-009 (Gold plated) 9530-9593-009 (Passivated)

QPL version available (M39012/83)



Right Angle Bulkhead Jack

Direct solder attachment

For .085" semi-rigid (A = .089): 9613-1563-010 (Gold plated) 9613-7563-010 (Nickel plated)

For .141" semi-rigid (A = .144): 9613-1563-009 (Gold plated) 9613-7563-009 (Nickel plated)

SEMI-RIGID CABLE JACKS

Straight Panel Jack

- Direct solder attachment
- Square flange
- Noncaptive contact

For .085" semi-rigid (A = .089):

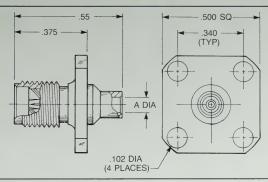
9431-1083-010 (Gold plated)

9431-7083-010 (Nickel plated)

For .141" semi-rigid (A = .144):

9431-1083-009 (Gold plated)

9431-7083-009 (Nickel plated)



Straight Panel Jack

- Direct solder attachment
- Square flange
- Captive contact for one-step cable assembly

For .085" semi-rigid (A = .089):

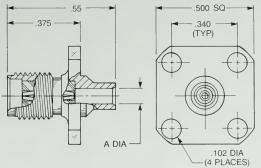
9431-1583-010 (Gold plated)

9431-7583-010 (Nickel plated)

For .141" semi-rigid (A = .144)

9431-1583-009 (Gold plated)

9431-7583-009 (Nickel plated)



Straight Panel Jack

- Direct solder attachment
- · 2-hole flange
- Noncaptive contact

For .085" semi-rigid (A = .089):

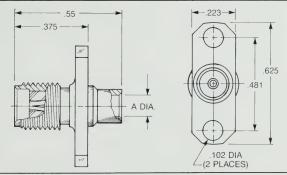
9441-1083-010 (Gold plated)

9441-7083-010 (Nickel plated)

For .141" semi-rigid (A = .144):

9441-1083-009 (Gold plated)

9441-7083-009 (Nickel plated)



Straight Panel Jack

- · Direct solder attachment
- 2-hole flange
- · Captive contact for one-step cable assembly

For .085'' semi-rigid (A = .089):

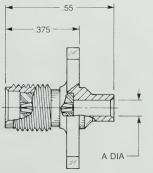
9441-1583-010 (Gold plated)

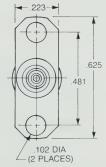
9441-7583-010 (Nickel plated)

For .141" semi-rigid (A = .144):

9441-1583-009 (Gold plated)

9441-7583-009 (Nickel plated)

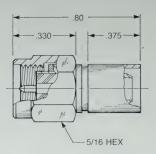




AEP New Haven, CT **203/776-2813**

FLEXIBLE CABLE PLUGS





Straight Plug

Noncaptive contact

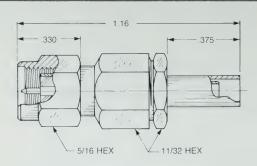
Crimp type:

9001-1023-0XX (Gold plated)

9001-9023-0XX (Passivated)

Solder type:

9001-1033-0XX (Gold plated)



Straight Plug

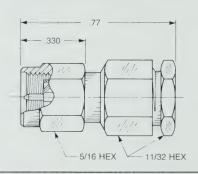
Captive contact

Crimp type:

9101-1573-0XX (Gold plated)

9101-9573-0XX (Passivated)

QPL version available (M39012/55)



Straight Plug

Captive contact

Clamp type:

9201-1553-0XX (Gold plated)

9201-9553-0XX (Passivated)

QPL version available (M39012/55)

Substitute	the appre	priate cable	group for 'XX':
------------	-----------	--------------	-----------------

- 01 RG142, RG223, M17/60, M17/84, M17/158 04
- RG178, RG196, M17/93, M17/169
- RG174, RG179, RG316, M17/113,
 - M17/119, M17/172, M17/173
- RG180, RG195, M17/95
- 05 RG178DS, RG196DS
- 06 RG58, RG141, RG303, M17/111, M17/155
- RG174DS, RG316DS, M17/152, Times RD316 19

FLEXIBLE CABLE PLUGS



Right Angle Plug

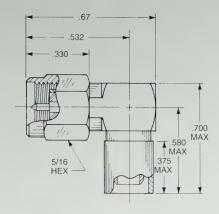
Captive contact

Crimp type:

9043-1523-0XX (Gold plated) **9043-9523-0XX** (Passivated)

Solder type:

9043-1533-0XX (Gold plated)

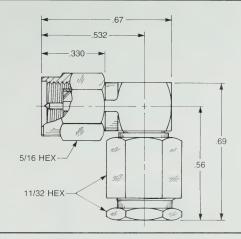


Right Angle Plug

Captive contact

Clamp type:

9243-1553-0XX (Gold plated) **9243-9553-0XX** (Passivated)



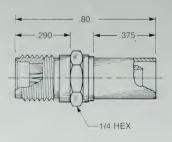
Substitute the appropriate cable group for 'XX':

01	RG142, RG223, M17/60, M17/84, M17/158	04	RG180, RG195, M17/95
02	RG178, RG196, M17/93, M17/169	05	RG178DS, RG196DS

03 RG174, RG179, RG316, M17/113, 06 RG58, RG141, RG303, M17/111, M17/155

M17/119, M17/172, M17/173 19 RG174DS, RG316DS, M17/152, Times RD316

FLEXIBLE CABLE JACKS



Straight Jack

Noncaptive contact

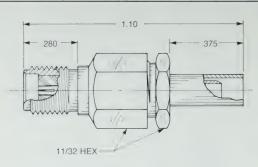
Crimp type:

9002-1023-0XX (Gold plated)

9002-9023-0XX (Passivated)

Solder type:

9002-1033-0XX (Gold plated)



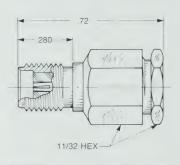
Straight Jack

Captive contact

Crimp type:

9102-1573-0XX (Gold plated)

9102-9573-0XX (Passivated)



Straight Jack

Captive contact

Clamp type:

9202-1553-0XX (Gold plated)

9202-9553-0XX (Passivated)

Substitute	the appro	priate cable	group for 'XX':
------------	-----------	--------------	-----------------

- 01 RG142, RG223, M17/60, M17/84, M17/158
- 02 RG178, RG196, M17/93, M17/169
- 03 RG174, RG179, RG316, M17/113,
 - M17/119, M17/172, M17/173

- 04 RG180, RG195, M17/95
- 05 RG178DS, RG196DS
- 06 RG58, RG141, RG303, M17/111, M17/155
- 19 RG174DS, RG316DS, M17/152, Times RD316



Straight Bulkhead Jack

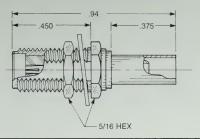
Noncaptive contact

Crimp type:

9030-1023-0XX (Gold plated) 9030-9023-0XX (Passivated)

Solder type:

9030-1033-0XX (Gold plated)



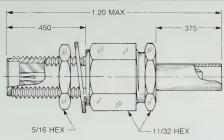
Straight Bulkhead Jack

Captive contact

Crimp type:

9130-1573-0XX (Gold plated)

9130-9573-0XX (Passivated)



Straight Bulkhead Jack

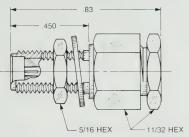
· Captive contact

Clamp type:

9230-1553-0XX (Gold plated)

9230-9553-0XX (Passivated)

QPL version available (M39012/59)

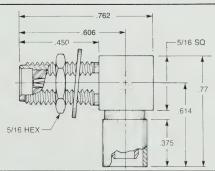


Right Angle Bulkhead Jack

Crimp type:

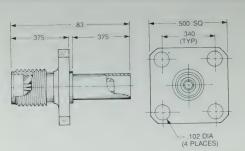
9613-1523-0XX (Gold plated)

9613-9523-0XX (Passivated)



Substitute the appropriate cable group for 'XX':					
01	RG142, RG223, M17/60, M17/84, M17/158	04	RG180, RG195, M17/95		
02	RG178, RG196, M17/93, M17/169	05	RG178DS, RG196DS		
03	RG174, RG179, RG316, M17/113,	06	RG58, RG141, RG303, M17/111, M17/155		
	M17/119, M17/172, M17/173	19	RG174DS, RG316DS, M17/152, Times RD316		

FLEXIBLE CABLE JACKS



Straight Panel Jack

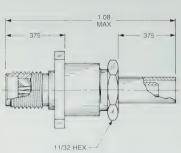
- · Noncaptive contact
- Square flange

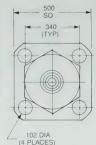
Crimp type:

9031-1023-0XX (Gold plated) 9031-9023-0XX (Passivated)

Solder type:

9031-1033-0XX (Gold plated)



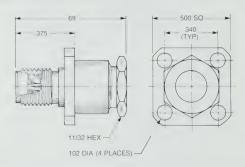


Straight Panel Jack

- Captive contact
- Square flange

Crimp type:

9131-1573-0XX (Gold plated) 9131-9573-0XX (Passivated)



Straight Panel Jack

- Captive contact
- · Square flange

Clamp type:

9231-1553-0XX (Gold plated) 9231-9553-0XX (Passivated)

Substitute the appropriate cable group for 'XX':

- 01 RG142, RG223, M17/60, M17/84, M17/158
- 02 RG178, RG196, M17/93, M17/169
- 03 RG174, RG179, RG316, M17/113, M17/119, M17/172, M17/173
- 04 RG180, RG195, M17/95
- 05 RG178DS, RG196DS
- 06 RG58, RG141, RG303, M17/111, M17/155
- 19 RG174DS, RG316DS, M17/152, Times RD316

PANEL JACK RECEPTACLES

sme

Straight Panel Jack Receptacle

- Extended contact and insulator
- 1/2" square flange

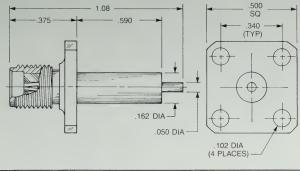
Captive contact:

9004-1113-000 (Gold plated) 9004-9113-000 (Passivated)

Noncaptive contact:

9004-1213-000 (Gold plated)

9004-9213-000 (Passivated)



Straight Panel Jack Receptacle

- Extended contact and insulator
- 2-hole flange

Captive contact:

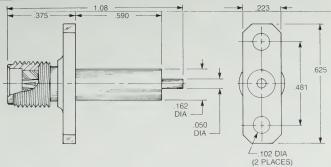
9008-1113-000 (Gold plated)

9008-9113-000 (Passivated)

Noncaptive contact:

9008-1213-000 (Gold plated)

9008-9213-000 (Passivated)



Straight Panel Jack Receptacle

- · Extended contact and insulator
- 3/8" square flange

Captive contact:

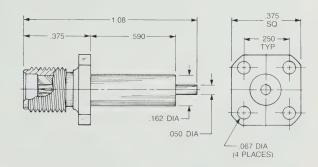
9076-1113-000 (Gold plated)

9076-9113-000 (Passivated)

Noncaptive contact:

9076-1213-000 (Gold plated)

9076-9213-000 (Passivated)



Straight Panel Jack Receptacle

- Extended contact and insulator
- Rectangular flange

Captive contact:

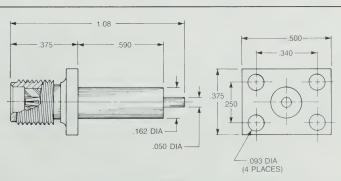
9007-1113-000 (Gold plated)

9007-9113-000 (Passivated)

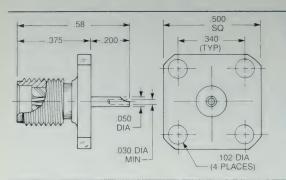
Noncaptive contact:

9007-1213-000 (Gold plated)

9007-9213-000 (Passivated)



PANEL JACK RECEPTACLES



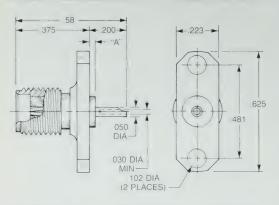
Straight Panel Jack Receptacle

- · Solder pot contact
- 1/2" square flange

Captive contact:

9404-1113-000 (Gold plated) 9404-9113-000 (Passivated)

QPL version available (M39012/60)



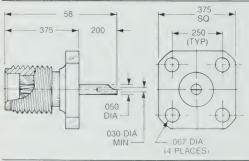
Straight Panel Jack Receptacle

- · Solder pot contact
- 2-hole flange

Captive contact (A = .030): 9408-1113-000 (Gold plated) 9408-9113-000 (Passivated)

Captive contact (A = .000): 9408-1113-002 (Gold plated) 9408-9113-002 (Passivated)

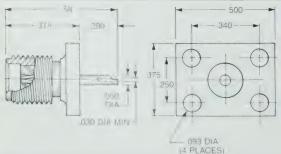
QPL version available (M39012/60)



Straight Panel Jack Receptacle

- Solder pot contact
- 3/8" square flange

Captive contact: 9476-1113-000 (Gold plated) 9476-9113-000 (Passivated)



Straight Panel Jack Receptacle

- · Solder pot contact
- · Rectangular flange

Captive contact: 9407-1113-000 (Gold plated) 9407-9113-000 (Passivated)



Straight Panel Jack Receptacle

- Tab contact
- 1/2" square flange

Captive contact:

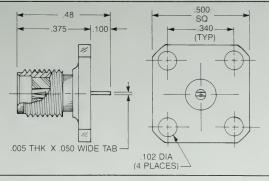
9104-1113-000 (Gold plated)

9104-9113-000 (Passivated)

Noncaptive contact:

9104-1213-000 (Gold plated)

9104-9213-000 (Passivated)



Straight Panel Jack Receptacle

- Tab contact
- 2-hole flange

Captive contact:

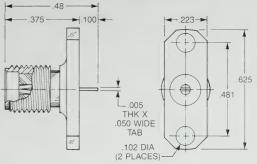
9108-1113-000 (Gold plated)

9108-9113-000 (Passivated)

Noncaptive contact:

9108-1213-000 (Gold plated)

9108-9213-000 (Passivated)



Straight Panel Jack Receptacle

- Tab contact
- 3/8" square flange

Captive contact:

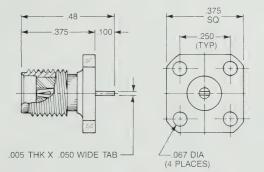
9176-1113-000 (Gold plated)

9176-9113-000 (Passivated)

Noncaptive contact:

9176-1213-000 (Gold plated)

9176-9213-000 (Passivated)



Straight Panel Jack Receptacle

- Tab contact
- Rectangular flange

Captive contact:

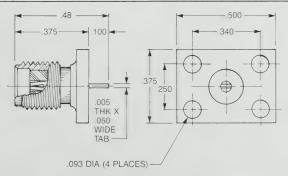
9107-1113-000 (Gold plated)

9107-9113-000 (Passivated)

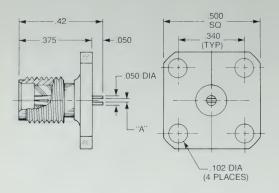
Noncaptive contact:

9107-1213-000 (Gold plated)

9107-9213-000 (Passivated)



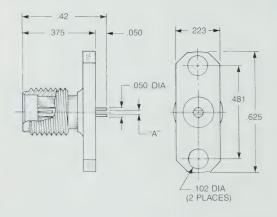




Straight Panel Jack Receptacle

- Slotted contact
- 1/2" square flange

Dim. A	Captive contact:	
.012	9204-1113-002	(Gold plated)
	9204-9113-002	(Passivated)
.018	9204-1113-001	(Gold plated)
	9204-9113-001	(Passivated)
.025	9204-1113-003	(Gold plated)
	9204-9113-003	(Passivated)
	Noncaptive contact	t:
.012	9204-1213-002	(Gold plated)
	9204-9213-002	(Passivated)
.018	9204-1213-001	(Gold plated)
	9204-9213-001	(Passivated)
.025	9204-1213-003	(Gold plated)
	9204-9213-003	(Passivated)



Straight Panel Jack Receptacle

Dim. A Captive contact:

- Slotted contact
- 2-hole flange

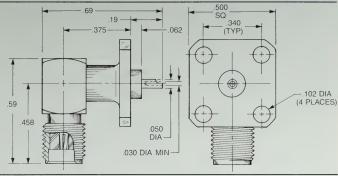
D 11111. 7 1	ouptivo contact.	
.012	9208-1113-001	(Gold plated)
	9208-9113-001	(Passivated)
.018	9208-1113-002	(Gold plated)
	9208-9113-002	(Passivated)
.025	9208-1113-003	(Gold plated)
	9208-9113-003	(Passivated)
	Noncaptive contact	:
.012	9208-1213-001	(Gold plated)
	9208-9213-001	(Passivated)
.018	9208-1213-002	(Gold plated)
	9208-9213-002	(Passivated)
.025	9208-1213-003	(Gold plated)
	9208-9213-003	(Passivated)



Right Angle Panel Jack Receptacle

- Solder pot contact
- 1/2" square flange

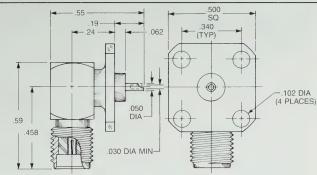
9424-1513-000 (Gold plated) **9424-9513-000** (Passivated)



Low Profile Right Angle Panel Jack Receptacle

- · Solder pot contact
- 1/2" square flange

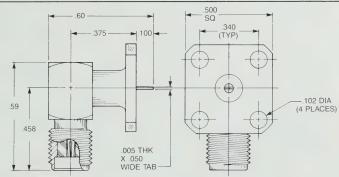
9425-1513-000 (Gold plated) **9425-9513-000** (Passivated)



Right Angle Panel Jack Receptacle

- Tab contact
- 1/2" hole flange

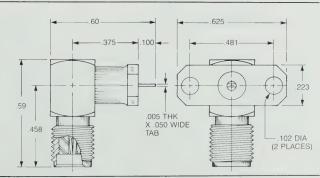
9124-1513-000 (Gold plated) 9124-9513-000 (Passivated)



Right Angle Panel Jack Receptacle

- Tab contact
- 2-hole flange

9126-1513-000 (Gold plated) 9126-9513-000 (Passivated)

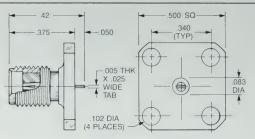




Standard SMA receptacles with tab contacts have the tab milled from a .050" diameter round contact. This .050" diameter is flush with the rear insulator of the connector.

When these connectors are used with .025" thick microstrip, a capacitive coupling can be introduced because of the close proximity of the microstrip ground plane to the .050" diameter.

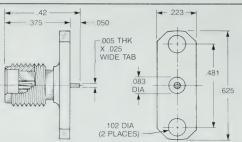
These receptacles eliminate the coupling by reducing the contact rear diameter to .025". The insulator diameter at the rear of the connector is reduced to .083" to maintain 50 ohm impedance.



Straight Jack Receptacle

• 1/2" square flange

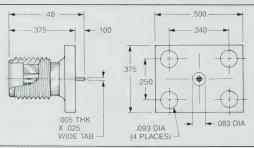
Captive contact: 9114-1113-000 (Gold plated) 9114-9113-000 (Passivated)



Straight Jack Receptacle

· 2-hole flange

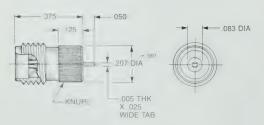
Captive contact: 9118-1113-000 (Gold plated) 9118-9113-000 (Passivated)



Straight Jack Receptacle

· Rectangular flange

Captive contact: 9117-1113-000 (Gold plated) 9117-9113-000 (Passivated)



Straight Jack Receptacle

Knurl mount

Captive contact: 9163-1113-000 (Gold plated) 9163-9113-000 (Passivated)

RECEPTACLES FOR .010" MICROSTRIP



The receptacles shown below have .010" diameter contacts for good electrical transition to narrow microstrip lines. The reduced-diameter insulators are extended beyond the flange face to carry 50 ohm impedance through the microstrip package wall. All have captive contacts.

Straight Jack Receptacle

• 1/2" square flange

A = .057:

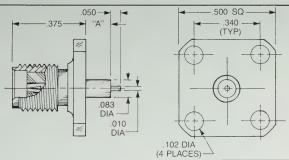
9304-1113-014 (Gold plated)

9304-9113-014 (Passivated)

A = .125

9304-1113-013 (Gold plated)

9304-9113-013 (Passivated)



Straight Jack Receptacle

· 2-hole flange

A = .057:

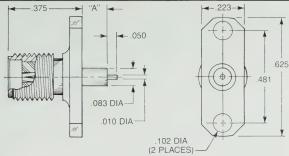
9308-1113-003 (Gold plated)

9308-9113-003 (Passivated)

A = .125:

9308-1113-001 (Gold plated)

9308-9113-001 (Passivated)



Straight Jack Receptacle

• 3/8" square flange

A = .057:

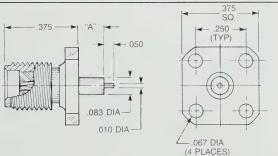
9376-1113-002 (Gold plated)

9376-9113-002 (Passivated)

A = .125:

9376-1113-001 (Gold plated)

9376-9113-001 (Passivated)



Straight Jack Receptacle

· Rectangular flange

A = .057:

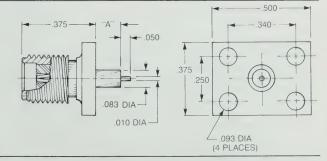
9307-1113-002 (Gold plated)

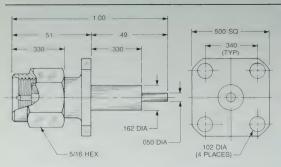
9307-9113-002 (Passivated)

A = .125:

9307-1113-001 (Gold plated)

9307-9113-001 (Passivated)





Straight Panel Plug Receptacle

- Extended contact and insulator
- 1/2" square flange

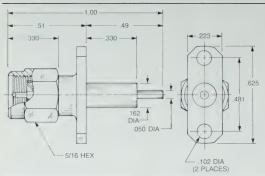
Captive contact:

9009-1113-000 (Gold plated) 9009-9113-000 (Passivated)

Noncaptive contact:

9009-1213-000 (Gold plated)

9009-9213-000 (Passivated)



Straight Panel Plug Receptacle

- Extended contact and insulator
- · 2-hole flange

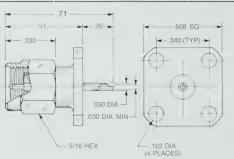
Captive contact:

9055-1113-000 (Gold plated) 9055-9113-000 (Passivated)

Noncaptive contact:

9055-1213-000 (Gold plated)

9055-9213-000 (Passivated)



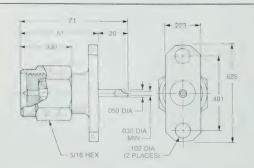
Straight Panel Plug Receptacle

- Solder pot contact
- 1/2" square flange

Captive contact:

9409-1113-000 (Gold plated)

9409-9113-000 (Passivated)



Straight Panel Plug Receptacle

- · Solder pot contact
- · 2-hole flange

Captive contact:

9455-1113-000 (Gold plated)

9455-9113-000 (Passivated)



Straight Panel Plug Receptacle

- Tab contact
- 1/2" square flange

Captive contact:

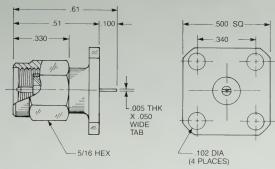
9109-1113-000 (Gold plated)

9109-9113-000 (Passivated)

Noncaptive contact:

9109-1213-000 (Gold plated)

9109-9213-000 (Passivated)



Straight Panel Plug Receptacle

- Tab contact
- · 2-hole flange

Captive contact:

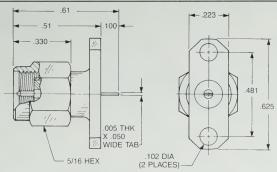
9155-1113-000 (Gold plated)

9155-9113-000 (Passivated)

Noncaptive contact:

9155-1213-000 (Gold plated)

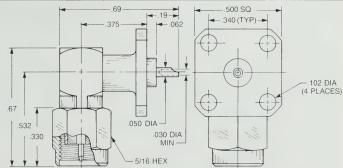
155-9213-000 (Passivated)



Right Angle Panel Plug Receptacle

- Solder pot contact
- 1/2" square flange

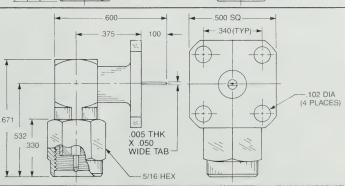
9454-1513-000 (Gold plated) **9454-9513-000** (Passivated)



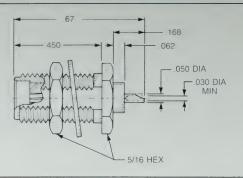
Right Angle Panel Plug Receptacle

- Tab contact
- 1/2" square flange

9154-1513-000 (Gold plated) **9154-9513-000** (Passivated)







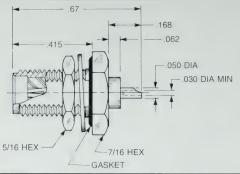
Straight Bulkhead Jack Receptacle

- Solder pot contact
- Rear mount

Captive contact:

9412-1113-000 (Gold plated)

9412-9113-000 (Passivated)



Straight Bulkhead Jack Receptacle

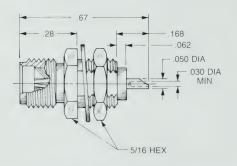
- Solder pot contact
- Rear mount
- · With mounting gasket

Captive contact:

9432-1113-000 (Gold plated)

9432-9113-000 (Passivated)

QPL version available (M39012/61)



Straight Bulkhead Jack Receptacle

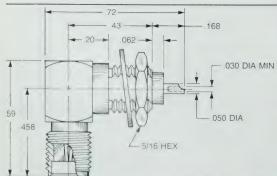
- Solder pot contact
- Front mount

Captive contact:

9422-1113-000 (Gold plated)

9422-9113-000 (Passivated)

QPL version available (M39012/61)



Right Angle Bulkhead Jack Receptacle

- Solder pot contact
- · Front mount

Captive contact:

9609-1513-000 (Gold plated)

9609-9513-000 (Passivated)



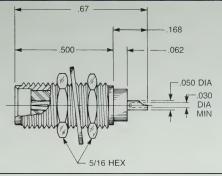
Straight Bulkhead Jack Receptacle

- Solder pot contact
- Round body
- · Provided with two mounting nuts and one lockwasher

Captive contact:

9413-1113-000 (Gold plated)

9413-9113-000 (Passivated)



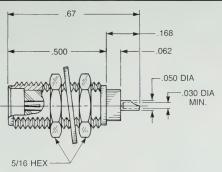
Straight Bulkhead Jack Receptacle

- Solder pot contact
- D-flatted body
- · Provided with two mounting nuts and one lockwasher

Captive contact:

9456-1113-002 (Gold plated)

9456-9113-002 (Passivated)



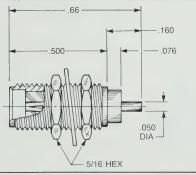
Straight Bulkhead Jack Receptacle

- Post contact
- Round body
- Provided with two mounting nuts and one lockwasher

Captive contact:

9013-1113-000 (Gold plated)

9013-9113-000 (Passivated)



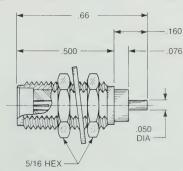
Straight Bulkhead Jack Receptacle

- Post contact
- D-flatted body
- Provided with two mounting nuts and one lockwasher

Captive contact:

9056-1113-000 (Gold plated)

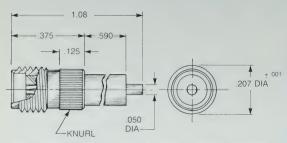
9056-9113-000 (Passivated)



SMO

These knurl mount receptacles can provide an economical alternative to flange mounted connectors, and are especially useful in dense packaging applications.

To ensure retention, these connectors should be used in panels of .100" minimum thickness. Gold-plated bodies can be soldered to the panel if necessary, but an absolute minimum of heat should be used to prevent insulator damage.



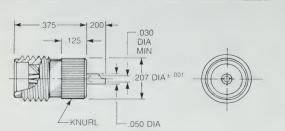
Straight Jack Receptacle

· Extended contact and insulator

Captive contact:

9033-1113-000 (Gold plated) 9033-9113-000 (Passivated)

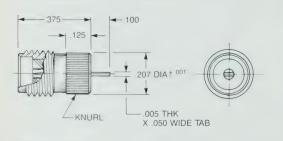
Noncaptive contact: 9033-1213-000 (Gold plated) 9033-9213-000 (Passivated)



Straight Jack Receptacle

Solder pot contact

Captive contact: 9433-1113-000 (Gold plated) 9433-9113-000 (Passivated)

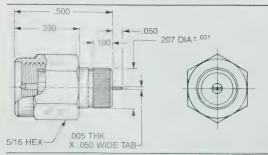


Straight Jack Receptacle

Tab contact

Captive contact: 9133-1113-000 (Gold plated) 9133-9113-000 (Passivated)

Noncaptive contact: 9133-1213-000 (Gold plated) 9133-9213-000 (Passivated)



Straight Plug Receptacle

Tab contact

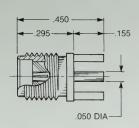
Captive contact: 9139-1113-000 (Gold plated) 9139-9113-000 (Passivated)

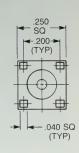
Noncaptive contact: 9139-1213-000 (Gold plated) 9139-9213-000 (Passivated)



Straight Jack Receptacle

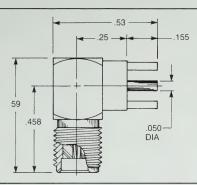
9650-1113-000 (Gold plated)

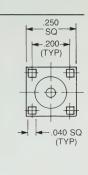




Right Angle Jack Receptacle

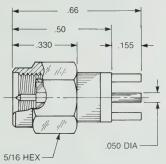
9647-1513-000 (Gold plated)

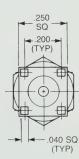




Straight Plug Receptacle

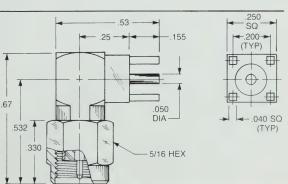
9649-1113-000 (Gold plated)



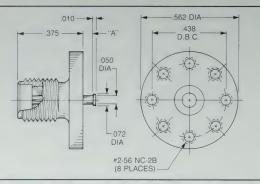


Right Angle Plug Receptacle

9646-1513-000 (Gold plated)



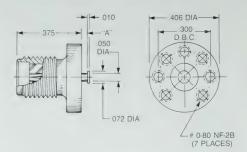




Straight Surface Mount Jack Receptacle

- Standard flange
- Noncaptive contact

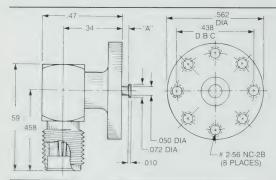
Dim. A		
.031	9003-1213-001	(Gold plated)
	9003-9213-001	(Passivated)
.063	9003-1213-002	(Gold plated)
	9003-9213-002	(Passivated)
.125	9003-1213-003	(Gold plated)
	9003-9213-003	(Passivated)



Straight Surface Mount Jack Receptacle

- · Small diameter flange
- Noncaptive contact

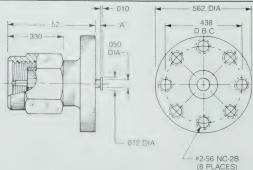
Dim. A		
.031	9610-1213-001	(Gold plated)
	9610-9213-001	(Passivated)
.063	9610-1213-002	(Gold plated)
	9610-9213-002	(Passivated)
.125	9610-1213-003	(Gold plated)
	9610-9213-003	(Passivated)



Right Angle Surface Mount Jack Receptacle

- Standard flange
- Noncaptive rear contact

Dim. A		
.031	9035-1513-001	(Gold plated)
	9035-9513-001	(Passivated)
.063	9035-1513-002	(Gold plated)
	9035-9513-002	(Passivated)
.125	9035-1513-003	(Gold plated)
	9035-9513-003	(Passivated)



Straight Surface Mount Plug Receptacle

- Standard flange
- Noncaptive contact

DIIII. A		
.031	9034-1213-001	(Gold plated)
	9034-9213-001	(Passivated)
.063	9034-1213-002	(Gold plated)
	9034-9213-002	(Passivated)
.125	9034-1213-003	(Gold plated)
	9034-9213-003	(Passivated)



AEP SMA hermetic seal launchers are designed for use with separate hermetic seals with pin diameters ranging from .012" to .036". The use of a connector / seal system rather than a connector with an integral seal means that microstrip boxes can remain sealed when connectors are removed or changed. The connectors can be reused many times on components that need to be 'connectorized' only for testing.

All the items in this section have passivated bodies. All other characteristics are as shown on page 7 for SMA series connectors.

The electrical performance of these launchers is dependent to a great extent upon the method used to affix the inner seal pin to the microstrip line. The application notes on pages 38 to 44 give a detailed explanation of the connectors' electrical characteristics.

We also have a wide variety of hermetic seals available in configurations other than those shown here. For information, call or write for our hermetic seal brochure.





APPLICATION NOTES

INTRODUCTION:

In recent years, as hermetically sealed MIC (Microwave Integrated Circuit) devices have come into common usage, designers have sought an alternative to "spark plug" type SMA connectors for launching from microstrip to a coaxial line. "Spark plug" launchers perform well electrically and mechanically, but they have some disadvantages: Because the hermetic seal is integral to the connector, the package loses hermeticity if the connector is removed. They are also expensive to manufacture, requiring costly special welding and testing equipment, and manufacturing yields can be quite low.

The alternative approach discussed here is to seal the package with an inexpensive 50 ohm hermetic seal, and use a non-hermetic SMA connector that fits over the protruding seal pin. The advantages are several: If the seal is damaged during installation, it can be replaced easily and cheaply. If a connector is damaged during service, it can be replaced without compromising the package's hermeticity. If devices are to be shipped with pins only, a connector can be put on for testing, removed, and reused for testing on other packages.

This type of connector is known by many names; no industrywide generic term has come into use. It may be variously described as a hermetic seal launcher, MIC launcher, field replaceable jack, or combinations of these terms.

All of these terms are descriptions of the same thing: SMA series receptacles designed for mounting on a hermetic seal which provides an environmental, mechanical, and electrical transition from a microstrip line to a coaxial line. They typically have flanges for mounting to the package; screw-in types are available but require a thick-walled package to allow for seal mounting.

DESIGN:

AEP SMA hermetic seal launchers are designed with mechanically captivated contacts and insulators. Epoxy captivation is avoided in order to eliminate RF leakage through epoxy fill holes at high frequencies.

50 ohm hermetic seals with pin diameters of .012", .015", and .018" use glass dielectrics that yield an outer ring diameter considerably smaller than the inner diameter of a standard SMA body. In order to make the transition from an SMA interface to this smaller diameter, the diameters of the connector body, contact, and insulator must be stepped down from the front (SMA interface) end of the connector to the rear (seal interface) end.

These steps, together with the barbs and shoulders used to captivate the contact and insulator, are designed and located to perform electrical compensation for locally capacitive or inductive sections. The seal's electrical characteristics and the impedance at the connector/seal interface are also compensated for in order to produce a connector and seal combination as close to 50 ohms overall as possible. Figure A illustrates the transitional steps and contact captivation method.



APPLICATION NOTES

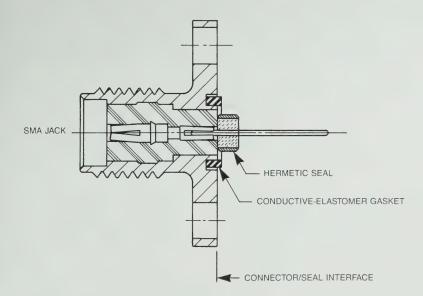
DESIGN, (continued)

A conductive-elastomer gasket is placed in a groove in the rear flange of the connector. This gasket ensures good RF grounding and guards against RF leakage due to irregularities in the connector flange or package surface.

Seals with .020" pin diameters have an outer ring diameter of .158". This is close enough to the inner diameter of an SMA body that the stepdown transition discussed above is not needed. Connectors for use with these seals have "straight through" contact and insulator diameters. This design precludes the use of the conductive gasket on the flange end.

Figure A

CONNECTOR/SEAL DESIGN



(Proportions altered to illustrate detail)



THE COAXIAL LINE TO MICROSTRIP INTERFACE:

Although the impedance of the connectors and seals can be tightly controlled at the point of manufacture, their performance in a system will be greatly affected by the method and process of attaching the seal pin to the microstrip line. It is **very important** for any discontinuities introduced by the pin attachment to be minimized and "tweaked" as much as possible to get the maximum electrical performance from the connector and seal.

The first step toward the best match is to select a seal with a pin diameter as close as possible to the microstrip line width. If the coaxial section (pin) is significantly larger than the microstrip section (line), the circuit will show an inductive discontinuity as the input signal radiates farther on the pin before entering the line (antenna effect). Conversely, if the line section is significantly larger than the pin, the circuit will become capacitive in this section.

Perhaps the most important part of the entire connector/seal/microstrip assembly is the pin-to-line attachment method and process. Please note that as connector manufacturers rather than microstrip circuit designers, we cannot recommend any specific method of pin attachment. The information shown here has been compiled from discussions with our customers. The method used in a given situation will depend on the specific design and operating requirements of the device, and the equipment available to the circuit manufacturer. As with any electronic device, tradeoffs are commonly required to balance the need for performance over a narrow or wide frequency bandwidth, and environmental and mechanical considerations.

When a microstrip device is subjected to a wide temperature range during service, a circumstance frequently arises which adds yet another consideration to the decision on the pin attachment method. If the thermal expansion coefficient of the package material is different from that of the substrate, relative movement between the pin and the line will occur during temperature changes. With widely different expansion rates, and/or wide temperature ranges, this movement can be enough to break a direct pin-to-line bond. In these cases, an attachment incorporating a sliding contact or a looped gold ribbon is commonly used to permit movement of the line relative to the pin. Keep in mind that most methods used to allow this movement will add discontinuities greater than those from a direct bond.

Whatever the method that is used for the pin attachment, a prototype unit should be examined with a fast rise-time TDR to determine if the attachment section is inductive or capacitive. An appropriate amount of capacitance or inductance should be added to the circuit to compensate for the discontinuities found.

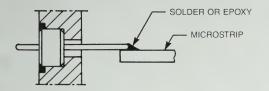


COAXIAL LINE TO MICROSTRIP INTERFACE, (continued)

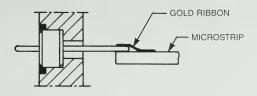
Figure B shows some of the more common methods of pin attachment: solder, gold ribbon bonding (commonly bonded by ultrasonic welding), and conductive epoxy. Mechanical pressure is sometimes used to hold the pin in contact with the line; this eliminates heating the circuit during attachment. New methods are being developed; one manufacturer uses a novel and proprietary process that lifts the microstrip line off the substrate and bonds it to the top of the pin.

Figure B

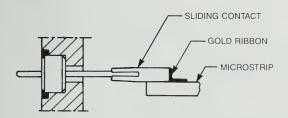
PIN TO LINE ATTACHMENT METHODS



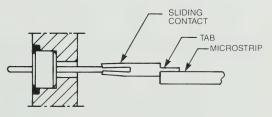
DIRECT PIN-TO-LINE BOND



GOLD RIBBON BOND



SLIDING CONTACT GOLD RIBBON BOND



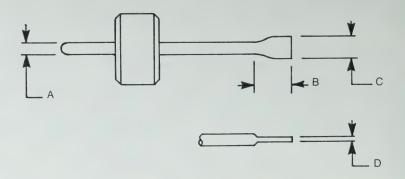
SLIDING CONTACT WITH TAB (DIRECT BOND OF TAB)

(Proportions altered to illustrate detail)



Some users report that using a seal with the circuit end of the seal pin flattened gives them better results than a standard round pin. Besides providing a smooth round-to-planar transition, the flattened pin can lessen discontinuity when the line width must be greater than the pin diameter. Figure C shows the dimensions of flattened ends for each standard pin size. Flattened ends are available at a small extra charge on all seals shown in our hermetic seal brochure or main catalogue.

Figure C SEALS WITH FLATTENED-END PINS



A (Pin Dia.)	B (±.005) (Flat Length)*	C (±.005) (Flat Width)	D (±.002) (Flat Thickness)
.012	.050	.025	.006
.015	.050	.030	.007
.018	.050	.035	.009
.020	.050	.040	.010

^{*}Other flat lengths available upon request.

TEST METHODS:

Test methods for these connectors vary widely, and disputes often arise when a user tests by a method different from the manufacturer's. It is important to remember that, as with any published data, the manufacturer's published performance specifications are based solely on testing by his method. If the user prefers another way of testing, his results can only be used to compare different manufacturer's parts or to check lot consistency.



APPLICATION NOTES

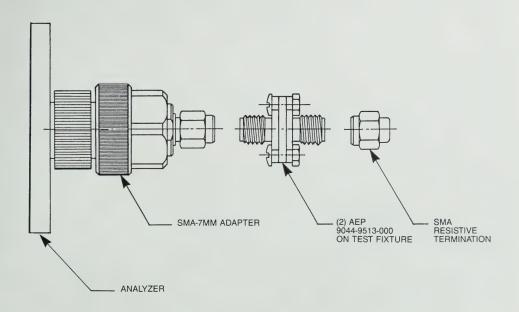
We have tested our connectors by several methods, and have found significant drawbacks in all except the last:

- 1) Testing on a "dummy" microstrip package (direct line from input to output) most closely simulates the final application of the connectors and seals. However, the test results will be skewed by the pin attachment method and will be valid for production units only if the attachment method in production is 100% the same as on the test fixture.
- 2) Testing two connectors bolted back-to-back with a pin joining the center contacts is inaccurate because it does not include the seal with which the connectors are designed to be used. This test method can also be inconsistent because of the difficulty of making sure the connectors are lined up with each other accurately.
- 3) Special resistive terminations that plug into the back of the connector also do not account for the compensation designed into the connector for the seal. One user who tests by this method found that the brand of connectors rated worst by the test fixture actually worked the best when installed on one of his products.

The test method used to obtain the information in figure E is to mount two connectors back-to-back on a fixture that has the appropriate seal installed (See figure D). The thickness of the fixture (a brass plate) is such that the seal surfaces are flush with the fixture surface, as they should be with the MIC package surface.

Figure D

TEST SETUP FOR HERMETIC SEAL LAUNCHERS





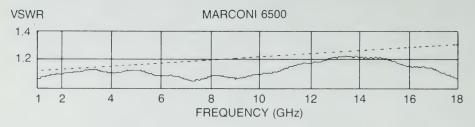
This method tests the connectors as they are ultimately used (two connector interfaces and two seal interfaces), and eliminates the variable of pin-to-line transitions. The VSWR figures obtained from this test method can be translated to single connector/seal VSWR by extracting the square root of the result.

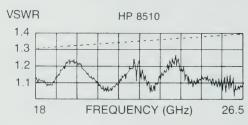
Although we believe that this test method most accurately reflects the performance of our connectors and seals, the results (figure E) should only be used as a baseline for estimating their VSWR contribution to a device. Any VSWR contributed by the pin-to-line attachment must be accounted for before the final performance of the device can be known.

We will be pleased to provide samples as required for assembly of prototype units. As with all of our products, requests for variations of the standard parts shown in our literature are welcome.

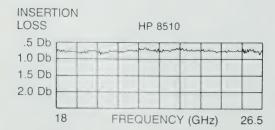
Figure E

TEST RESULTS, (2) 9044-9513-000 TESTED PER FIGURE D





Dotted line = VSWR (1.05 + .005F [GHz])² Max. VSWR DC-18 GHz: 1.23: 1 @ 13.93 GHz Max. VSWR DC-26.5 GHz: 1.28: 1 @ 23.74 GHz





HERMETIC SEAL DATA

SPECIFICATIONS

Materials

All metal parts: Kovar, gold plated per MIL-G-45204 type II, grade C, class 1 over nickel per MIL-C-26074, class 1, over copper per MIL-C-14550.

Glass: Corning glass as noted:

P/N	Glass
920-55	7052
920-56	7070
920-69	7052
920-82	7070
920-92	7052

Hermeticity: Greater than 1×10^{-8} cc/sec

@ 1 atmosphere.

Impedance: 50 ± 1 ohms.

Frequency range: DC-26 GHz.

Insertion loss: .1 Db max to 12.4 GHz.

.2 Db max to 18 GHz.

.25 Db max to 26 GHz.

VSWR: Dependent on application.

Rated voltage: 335 V RMS max @ sea level.

Rated current: 500 ma.

DWV: 1000 V RMS @ sea level.

Insulation resistance: 100K megohms (25°C)

Solderability: Per MIL-STD-202, method 209.

Meniscus: .005" max. Pin concentricity: .003 T.I.R. Temperature range: -65 to 250°C.

SOLDER .012 -.001 +.000

Mounting Dimensions

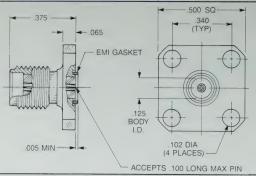
P/N	A(±.001)	B(±.001)	C
920-55	.127	.102	.070
920-56	.140	.115	.070
920-69	.188	.163	.060
920-82	.127	.102	.070
920-92	.188	.163	.075

NOTES:

- 1) The hermetic seal should be as flush as possible with the surface of the package. When the seal is recessed into the mounting hole, an air gap is created which adversely affects electrical performance. A slight protrusion (less than .005") is acceptable.
- 2) A solder ring should be used which will fill the counterbore flush with the package surface after soldering. The counterbore can be an 80 to 90 degree countersink rather than square-bottomed as shown, but still must be filled to avoid an air gap.
- 3) Some users, especially when using a small pin diameter and a thick-walled package, use a Teflon insulator in the package wall to support the pin. The through-hole diameters shown below are for 50 ohm impedance.

Pin Diameter	'D'-Air Dielectric	'D'-Teflon Dielectric	
.012	.028	.040	
.015	.035	.050	
.018	.041	.059	
.020	.046	.066	

FOR .012" DIAMETER PINS



Straight Jack 1/2" Square Flange

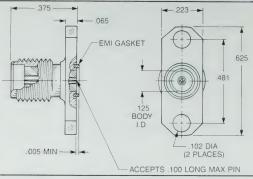
9045-9513-000

9345-9513-000

Optional packaging:

9145-9513-000 (Includes 920-55) 9245-9513-000 (Includes 920-55

and 907-111-1) (Includes 907-111-1)



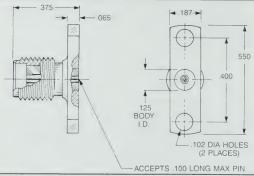
Straight Jack 2-Hole Flange

9044-9513-000

Optional packaging:

9144-9513-000 (Includes 920-55) 9244-9513-000 (Includes 920-55 and 907-111-1)

9344-9513-000 (Includes 907-111-1)



Straight Jack Narrow 2-Hole Flange

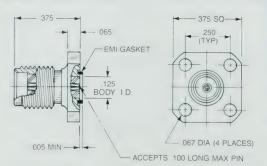
No EMI gasket 9080-9513-000

Optional packaging:

9180-9513-000 (Includes 920-55) 9280-9513-000 (Includes 920-55

and 907-111-1)

9380-9513-000 (Includes 907-111-1)



Straight Jack 3/8" Square Flange

9079-9513-000

Optional packaging:

9179-9513-000 (Includes 920-55)

9279-9513-000 (Includes 920-55

and 907-111-1)

9379-9513-000 (Includes 907-111-1)



FOR .012" DIAMETER PINS

Straight Jack Rectangular Flange

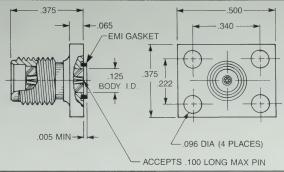
9062-9513-000

Optional packaging:

9162-9513-000 (Includes 920-55) **9262-9513-000** (Includes 920-55

and 907-111-1)

9362-9513-000 (Includes 907-111-1)



Straight Plug 1/2" Square Flange

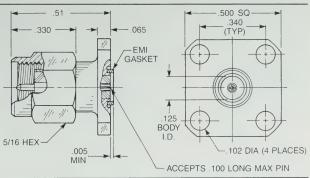
9047-9513-000

Optional packaging:

9147-9513-000 (Includes 920-55) **9247-9513-000** (Includes 920-55

and 907-111-1)

9347-9513-000 (Includes 907-111-1)



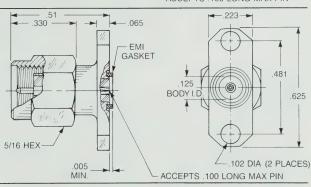
Straight Plug 2-Hole Flange

9046-9513-000

Optional packaging:

9146-9513-000 (Includes 920-55) **9246-9513-000** (Includes 920-55 and 907-111-1)

9346-9513-000 (Includes 907-111-11)

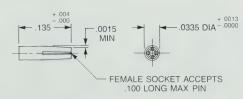


Solder-In Hermetic Seal

See page 45 for material and finish specifications and mounting dimensions.

Accessory Contact

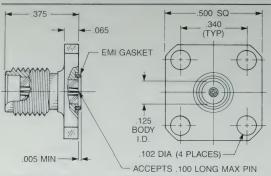
P/N 907-111-1



Material: Beryllium copper

Finish: Gold per MIL-G-45204, type II, class I, grade C, over .0001 copper per MIL-C-14550

FOR .015" DIAMETER PINS



Straight Jack 1/2" Square Flange

9045-9513-001

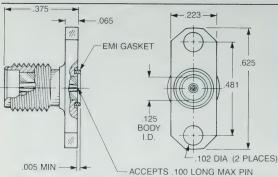
Optional packaging:

9145-9513-001 (Includes 920-82) 9245-9513-001 (Includes 920-82

and 907-111-5)

9345-9513-001

(Includes 907-111-5)



Straight Jack 2-Hole Flange

9044-9513-001

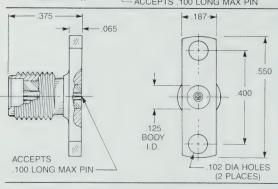
Optional packaging:

9144-9513-001 (Includes 920-82) 9244-9513-001 (Includes 920-82

and 907-111-5)

9344-9513-001

(Includes 907-111-5)



Straight Jack Narrow 2-Hole Flange

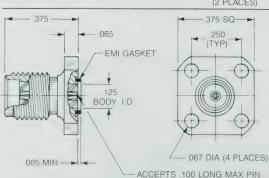
No EMI gasket 9080-9513-001

Optional packaging:

9180-9513-001 (Includes 920-82) 9280-9513-001 (Includes 920-82

and 907-111-5)

(Includes 907-111-5) 9380-9513-001



Straight Jack 3/8" Square Flange

9079-9513-001

Optional packaging:

9179-9513-001 (Includes 920-82) 9279-9513-001 (Includes 920-82

and 907-111-5)

9379-9513-001 (Includes 907-111-5)



FOR .015" DIAMETER PINS

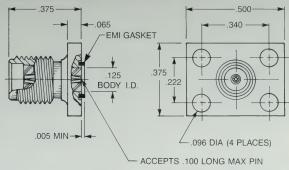
Straight Jack Rectangular Flange

9062-9513-001

Optional packaging:

9162-9513-001 (Includes 920-82) 9262-9513-001 (Includes 920-82) and 907-111-5)

9362-9513-001 (Includes 907-111-5)



Straight Plug 1/2" Square Flange

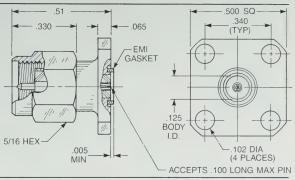
9047-9513-001

Optional packaging:

9147-9513-001 (Includes 920-82) **9247-9513-001** (Includes 920-82)

and 907-111-5)

9347-9513-001 (Includes 907-111-5)



Straight Plug 2-Hole Flange

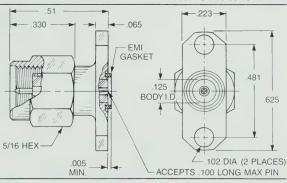
9046-9513-001

Optional packaging:

9146-9513-001 (Includes 920-82) **9246-9513-001** (Includes 920-82)

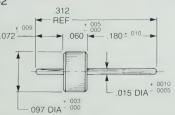
and 907-111-5)

9346-9513-001 (Includes 907-111-5)



Solder-In Hermetic Seal

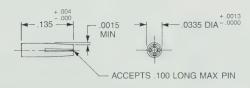
P/N 920-82



See page 45 for material and finish specifications and mounting dimensions.

Accessory Contact

P/N 907-111-5

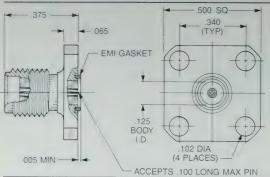


Material: Beryllium copper.

Finish: Gold per MIL-G-45204, type II, class 1, grade C, over .0001 copper per MIL-C-14450.



FOR .018" DIAMETER PINS



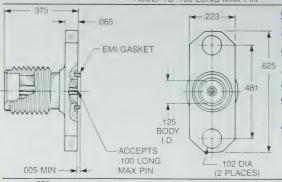
Straight Jack 1/2" Square Flange

9049-9513-000

Optional packaging:

9149-9513-000 (Includes 920-56) 9249-9513-000 (Includes 920-56 and 907-111-2)

9349-9513-000 (Includes 907-111-2)



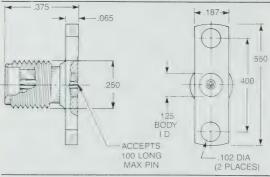
Straight Jack 2-Hole Flange

9048-9513-000

Optional packaging:

9148-9513-000 (Includes 920-56) 9248-9513-000 (Includes 920-56 and 907-111-2)

9348-9513-000 (Includes 907-111-2)



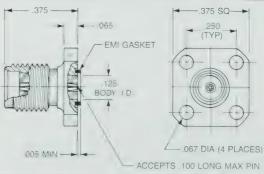
Straight Jack Narrow 2-Hole Flange

No EMI gasket 9081-9513-000

Optional packaging:

9181-9513-000 (Includes 920-56) 9281-9513-000 (Includes 920-56 and 907-111-2)

9381-9513-000 (Includes 907-111-2)



Straight Jack 3/8" Square Flange

9074-9513-000

Optional packaging:

9174-9513-000 (Includes 920-56) 9274-9513-000 (Includes 920-56 and 907-111-2)

9374-9513-000 (Includes 907-111-2)



FOR .018" DIAMETER PINS

Straight Jack **Rectangular Flange**

9068-9513-000

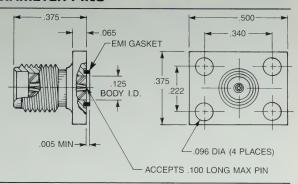
Optional packaging:

9168-9513-000 (Includes 920-56)

9268-9513-000 (Includes 920-56

and 907-111-2)

9368-9513-000 (Includes 907-111-2)



Straight Plug 1/2" Square Flange

9051-9513-000

9251-9513-000

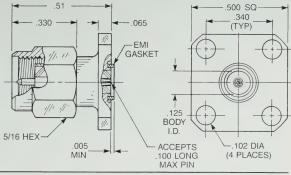
9351-9513-000

Optional packaging:

9151-9513-000 (Includes 920-56)

(Includes 920-56

and 907-111-2) (Includes 907-111-2)



Straight Plug 2-Hole Flange

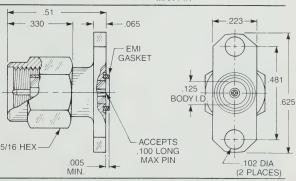
9050-9513-000

Optional packaging:

9150-9513-000 (Includes 920-56) 9250-9513-000 (Includes 920-56

and 907-111-2)

9350-9513-000 (Includes 907-111-2)



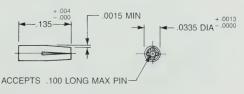
Solder-In Hermetic Seal

P/N 920-56 .180 ± .010 .060 ⊨ .018 DIA - .0005 + .003 - .110 DIA - 000

See page 45 for material and finish specifications and mounting dimensions.

Accessory Contact

P/N 907-111-2



Material: Beryllium copper

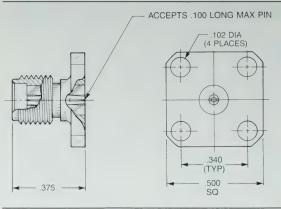
Finish: Gold per MIL-G-45204, type II, class 1, grade C over .0001 copper per MIL-C-14450

QMAL HE

HERMETIC SEAL LAUNCHERS

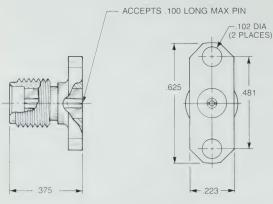
FOR .020" DIAMETER PINS

The hermetic seal launchers shown here are designed for use with seals having a .020" pin diameter, and a .160" outer ring diameter. The contact and insulator diameters are constant through these connectors, since they do not require the internal compensation featured in the launchers for smaller seals. The large outer diameter of the seals precludes the use of EMI gaskets on these connectors.



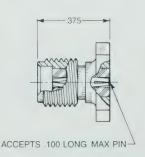
Straight Jack 1/2" Square Flange

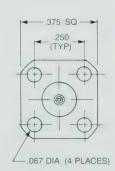
9504-9113-031 9504-9113-034 (Includes 920-69)



Straight Jack 2-Hole Flange

9508-9113-002 9508-9113-003 (Includes 920-69)





Straight Jack 3/8" Square Flange

9576-9113-001 9576-9113-002 (Includes 920-69)

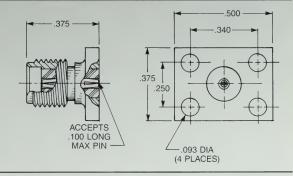


FOR .020" DIAMETER PINS

Straight Jack Rectangular Flange

9507-9113-003 9507-9113-004

(Includes 920-69)

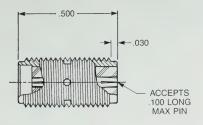


Straight Jack Screw-In Mounting

9513-9113-009

9513-9113-012 (Includes 920-69)

These connectors require a minimum package wall thickness of .250" for proper retention

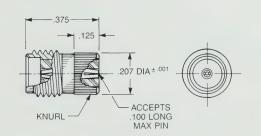


Straight Jack Knurl Mount

9533-9113-003 9533-9113-002

(Includes 920-69)

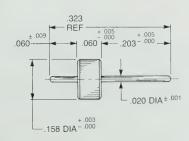
These connectors require a minimum package wall thickness of .235" for proper retention



Solder-In Hermetic Seal

P/N 920-69

See page 45 for material and finish specifications and mounting dimensions.

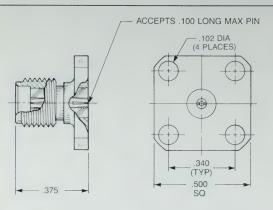


smo

HERMETIC SEAL LAUNCHERS

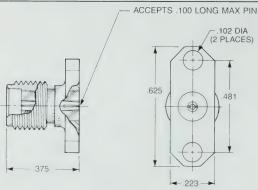
FOR .036" DIAMETER PINS

The hermetic seal launchers shown here are designed for use with hermetic seals having a .036" diameter pin on the connector (outer) side, and a .020" diameter pin on the circuit (inner) side. The seal outer ring is .158" diameter. The contact and insulator diameters are constant through these connectors, since they do not require the internal compensation featured in the launchers for smaller seals. The large outer diameter of the seals precludes the use of EMI gaskets on these connectors.



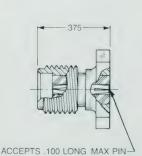
Straight Jack 1/2" Square Flange

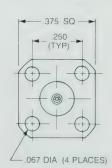
9504-9113-009 9504-9113-035 (Includes 920-92)



Straight Jack 2-Hole Flange

9508-9113-001 9508-9113-011 (Includes 920-92)





Straight Jack 3/8" Square Flange

9576-9113-003 9576-9113-004 (Includes 920-92)



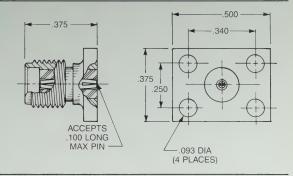
FOR .036" DIAMETER PINS

Straight Jack Rectangular Flange

9507-9113-005

9507-9113-006

(Includes 920-92)

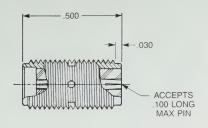


Straight Jack Screw-In Mounting

9513-9113-008

9513-9113-013 (Includes 920-92)

These connectors require a minimum package wall thickness of .250" for proper retention

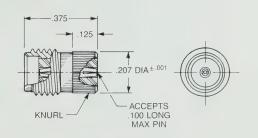


Straight Jack Knurl Mount

9533-9113-001

9533-9113-004 (Includes 920-92)

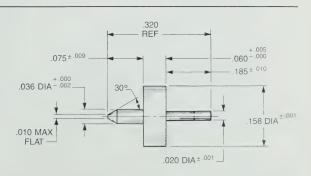
These connectors require a minimum package wall thickness of .235" for proper retention.



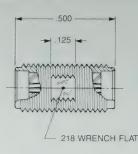
Solder-In Hermetic Seal

P/N 920-92

See page 45 for material and finish specifications and mounting dimensions.



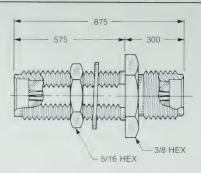




Straight Jack To Jack Adapter

· Connects two plugs

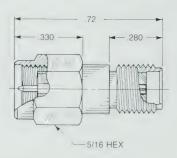
Captive contact: 5917-1103-000 (Gold plated) 5917-9103-000 (Passivated)



Straight Bulkhead Mounted Jack To Jack Adapter

· Connects two plugs

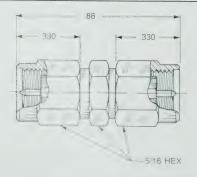
Captive contact: 5909-1103-000 (Gold plated) 5909-9103-000 (Passivated)



Straight Jack To Plug Adapter

 Prevents damage to equipment-mounted jacks during frequent mating and unmating

Captive contact: 5916-1103-603 (Gold plated) 5916-9103-603 (Passivated)



Straight Plug To Plug Adapter

Connects two jacks

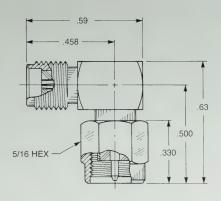
Captive contact: 5918-1103-000 (Gold plated) 5918-9103-000 (Passivated)



Right Angle Jack To Plug Adapter

· Connects one jack and one plug

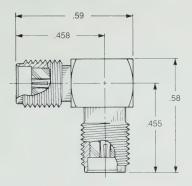
5919-1503-000 (Gold plated) **5919-9503-000** (Passivated)



Right Angle Jack To Jack Adapter

Connects two plugs

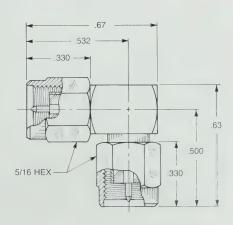
5919-1503-003 (Gold plated) **5919-9503-003** (Passivated)



Right Angle Plug To Plug Adapter

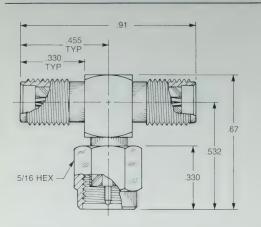
Connects two jacks

5919-1503-001 (Gold plated) **5919-9503-001** (Passivated)





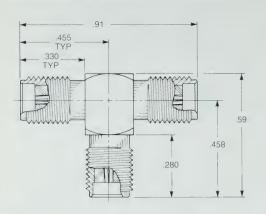
RESISTIVE TERMINATIONS



Tee Adapter (Unmatched Power Divider) Jack To Plug To Jack

· Connects two plugs and one jack

5905-1503-000 (Gold plated) **5905-9503-000** (Passivated)



Tee Adapter (Unmatched Power Divider) Jack To Jack To Jack

· Connects three plugs

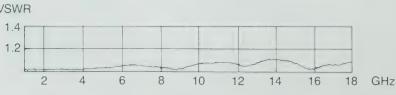
5903-1503-000 (Gold plated) **5903-9503-000** (Passivated)



Plug Resistive Termination (Dummy Load)

- VSWR 1.15: 1 max. to 18 GHz.
- Maximum average power: 1 watt
- · Peak power: 1.5 watts

9620-9003-151 (Passivated)





AEP SMB series connectors meet or exceed MIL-C-39012 performance requirements, offering good electrical performance to 10 GHz. Their snap-on mating makes them ideal for use in confined areas where the use of wrenches is not practical.

AEP SMC series connectors offer the same low cost and small size as SMB series, but their screw-on mating provides extra mating security. Frequency range: DC-10 GHz.

SMB and SMC connectors with a MIL-C-39012 QPL version available have the appropriate slash sheet noted. See pages 3 and 4 for a complete listing of SMB and SMC QPL connectors.

AEP SLB series connectors are similar to SMB series, but have slide-on mating for use in multiple mounting or rack-and-panel applications. SLB plugs will mate with SMB jacks.

Standard cables for use with these connectors are shown at the bottom of the appropriate product pages. A complete listing of cable groups is on page 145. All the items shown are available with either gold or nickel plated bodies; part numbers for each finish are shown in the product section. The index listing for each connector shows the appropriate cable assembly instruction. Assembly instructions start on page 148.

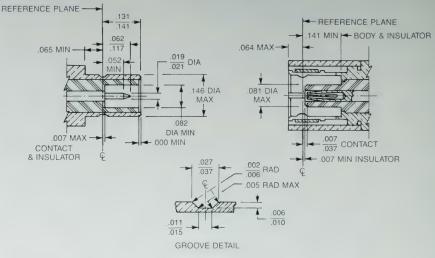
Factory-built cable assemblies using these connectors are available from AEP.





INTERFACE DIMENSIONS

MIL-STD-348

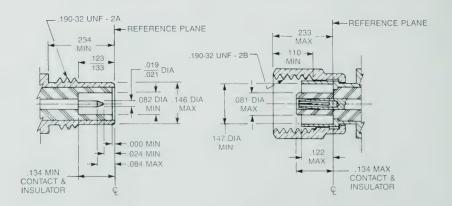


SLB dimensions identical to above except without detent.



INTERFACE DIMENSIONS

MIL-STD-348





SPECIFICATIONS

MIL-C-39012C

Materials:

Body components, male contacts:

Brass per QQ-B-626, alloy 360, 1/2 hard.

Female contact: Beryllium copper per QQ-C-530,

condition HT.

Insulators: Teflon TFE per ASTM-D-1710.

Finish:

Center contacts: Gold plated per

MIL-G-45204.

All other parts finished to meet

MIL-C-39012 corrosion requirements.

Electrical:

Impedance: 50 ohms.

Frequency range: SMC: DC-10 GHz.

SMB, SLB: DC-4 GHz.

Voltage Rating:

RG178: 250 VRMS, sea level. RG316: 335 VRMS, sea level.

Insulation resistance: 1000 megohms min.

VSWR:

SMB, SLB straight connector: RG178: 1.30 + (.04xF[GHz]). RG316: 1.25 + (.04xF[GHz])

SMB, SLB right angle:

RG178: 1.45 + (.06xF[GHz]) RG316: 1.35 + (.04xF[GHz])

SMC straight connector:

RG178: 1.25 + (.04xF[GHz]) RG316: 1.20 + (.04xF[GHz])

SMC right angle:

RG178: 1.40 + (.06xF[GHz]) RG316: 1.30 + (.04xF[GHz])

Contact resistance:

Straight, 6 milliohms max initial, 8 milliohms max after environment. Right angle, 12 milliohms max initial, 16 milliohms max after environment.

Dielectric Withstanding Voltage (sea level):

RG178: 750 VRMS. RG316: 1000 VRMS. Corona level @ 70,000 ft.:

RG178: 185 VRMS.

RG316: 250 VRMS.

RF highpot @ 5MHz: RG178: 500 VRMS.

RG316: 700 VRMS.

RF leakage:

SMB, SLB: -55 Db min, 2-3 GHz.

SMC: -60 Db min, 2-3 GHz.

Insertion loss:

SMB, SLB @ 1.5 GHz:

Straight .030 Db max.

Right angle .060 Db max.

SMC @ 4 GHz:

Straight .25 Db max.

Right angle .50 Db max.

Mechanical:

Force to engage: SMB, 14 pounds max,

SLB 6 pounds max.

Mating torque: SMC, 35-50 inch ounces.

Coupling nut pulloff resistance:

SMC, 35 pounds min.

Contact retention (captive contact

connectors): 4 pounds min. axial force.

Durability: 500 mating cycles.

Environmental:

(per MIL-STD-202)

Temperature rating: -65° C to + 165° C.

Corrosion: Method 101, condition B.

5% salt solution.

Vibration: Method 204,

SMB, condition B.

SMC, condition D.

Mechanical shock: Method 213,

SMB, condition B.

SMC, condition C.

Thermal shock: method 107, condition B.

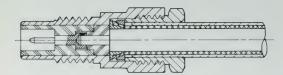


Cable Attachment Methods

All connectors in these series have captivated contacts which are soldered to the cable center conductor. All the cable attachment methods shown have gripping force greater than the breaking strength of the cable.

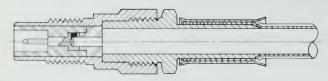
Clamp Type For Flexible Cable

These connectors can be assembled without special tooling, and are field replaceable. They provide metal-to-metal clamping of the cable braid.



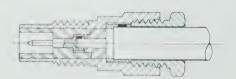
Crimp Type For Flexible Cable

Crimping the cable braid is the most reliable and repeatable method of cable assembly, and provides support for the cable during flexure. AEP crimp type connectors are assembled quickly and easily using readily-available commercial or MIL crimp tools.



Solder-Clamp For Semi-Rigid Cable

This method allows retrimming of the cable dielectric, if necessary, during assembly. Connectors can be repositioned relative to the cable after assembly by loosening the clamp nut. Solder-clamp connectors are field replaceable without special tools.



STRAIGHT AND RIGHT ANGLE

Straight Female Cable Plug

Clamp type for flexible cable: 2002-1551-0XX (Gold plated)

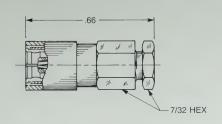
2002-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable:

2002-1541-0XX (Gold plated)

2002-7541-0XX (Nickel plated)

QPL version available (M39012/67)

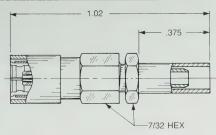


Straight Female Cable Plug

Crimp type for flexible cable:

2002-1571-0XX (Gold plated) **2002-7571-0XX** (Nickel plated)

QPL version available (M39012/67)



Right Angle Female Cable Plug

Clamp type for flexible cable:

2005-1551-0XX (Gold plated) **2005-7551-0XX** (Nickel plated)

Solder-clamp for semi-rigid cable:

2005-1541-0XX (Gold plated) **2005-7541-0XX** (Nickel plated)

QPL version available (M39012/69)

.52 .391 .391 .468

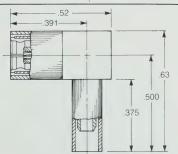
Right Angle Female Cable Plug

Crimp type for flexible cable:

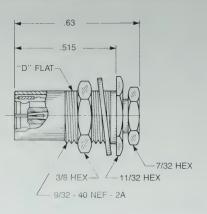
2105-1521-0XX (Gold plated)

2105-7521-0XX (Nickel plated)

QPL version available (M39012/69)



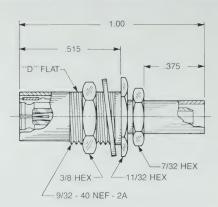
	Substitute the appropriate cable group for 'XX':			
02	02 RG178, RG196, M17/93, M17/169 09 .141" semi-rigid, RG402, M17/130			
03	RG174, RG179, RG316, M17/113,	10	.085" semi-rigid, RG405, M17/133	
	M17/119, M17/172, M17/173	19	RG174DS, RG316DS,	
05	RG178DS, RG196DS		M17/152, Times RD316	



Bulkhead Mounted Straight Cable Plug

Clamp type for flexible cable: 2028-1551-0XX (Gold plated) 2028-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid: 2028-1541-0XX (Gold plated) 2028-7541-0XX (Nickel plated)



Bulkhead Mounted Straight Cable Plug

Crimp type for flexible cable: 2028-1571-0XX (Gold plated) 2028-7571-0XX (Nickel plated)

Substitute the appropriate cable group for 'XX':		
02 RG178, RG196, M17/93, M17/169	09 .141" semi-rigid, RG402, M17/130	
03 RG174, RG179, RG316, M17/113,	10 .085" semi-rigid, RG405, M17/133	
M17/119, M17/172, M17/173	19 RG174DS, RG316DS,	
05 RG178DS, RG196DS	M17/152, Times RD316	

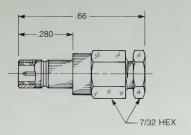


Straight Male Cable Jack

Clamp type for flexible cable: 2001-1551-0XX (Gold plated) 2001-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 2001-1541-0XX (Gold plated) 2001-7541-0XX (Nickel plated)

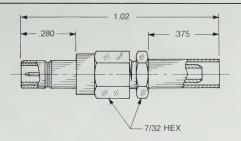
QPL version available (M39012/68)



Straight Male Cable Jack

Crimp type for flexible cable: 2001-1571-0XX (Gold plated) 2001-7571-0XX (Nickel plated)

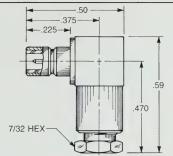
QPL version available (M39012/68)



Right Angle Male Cable Jack

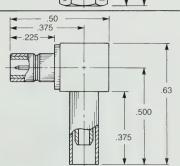
Clamp type for flexible cable: 2041-1551-0XX (Gold plated) 2041-7551-0XX (Nicke! plated)

Solder-clamp for semi-rigid cable: 2041-1541-0XX (Gold plated) 2041-7541-0XX (Nickel plated)



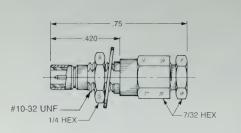
Right Angle Male Cable Jack

Crimp type for flexible cable: 2141-1521-0XX (Gold plated) 2141-7521-0XX (Nickel plated)



	Substitute the app	ropriate cab	le group for 'XX':
02	RG178, RG196, M17/93, M17/169	09	.141" semi-rigid, RG402, M17/130
03	RG174, RG179, RG316, M17/113,	10	.085" semi-rigid, RG405, M17/133
	M17/119, M17/172, M17/173	19	RG174DS, RG316DS,
05	RG178DS, RG196DS		M17/152, Times RD316



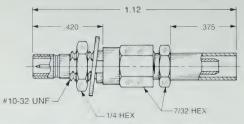


Straight Male Bulkhead Cable Jack

Clamp type for flexible cable: 2003-1551-0XX (Gold plated) 2003-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 2003-1541-0XX (Gold plated) 2003-7541-0XX (Nickel plated)

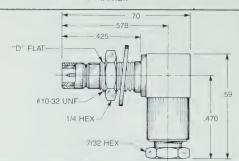
QPL version available (M39012/70)



Straight Male Bulkhead Cable Jack

Crimp type for flexible cable: 2003-1571-0XX (Gold plated) 2003-7571-0XX (Nickel plated)

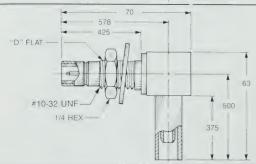
QPL version available (M39012/70)



Bulkhead Mounted Right Angle Male Cable Jack

Clamp type for flexible cable: 2006-1551-0XX (Gold plated) 2006-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 2006-1541-0XX (Gold plated) 2006-7541-0XX (Nickel plated)



Bulkhead Mounted Right Angle Male Cable Jack

Crimp type for flexible cable: 2106-1521-0XX (Gold plated) 2106-7521-0XX (Nickel plated)

Substitute th	e appropriate cable group for 'XX':
02 RG178. RG196. M17/93. M17/169	09 .141" semi-rigid, RG402, M17/130
03 RG174, RG179, RG316, M17/113,	10 .085" semi-rigid, RG405, M17/133
M17/119, M17/172, M17/173	19 RG174DS, RG316DS,
05 RG178DS, RG196DS	M17/152, Times RD316

BULKHEAD JACK RECEPTACLES

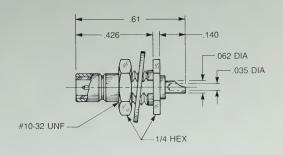


Straight Male Bulkhead Jack Receptacle

- Solder pot contact
- Rear mount

2004-1511-000 (Gold plated) **2004-7511-000** (Nickel plated)

QPL version available (M39012/71)

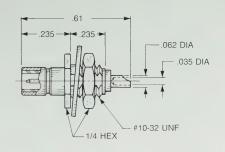


Straight Male Bulkhead Jack Receptacle

- Solder pot contact
- Front mount

2019-1511-000 (Gold plated) **2019-7511-000** (Nickel plated)

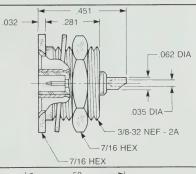
QPL version available (M39012/71)



Straight Male Bulkhead Jack Receptacle

- Solder pot contact
- · Recessed front mount

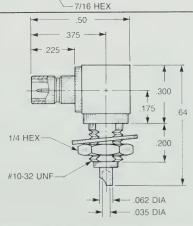
2014-1511-000 (Gold plated) **2014-7511-000** (Nickel plated)



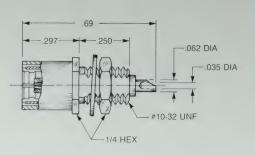
Right Angle Male Bulkhead Jack Receptacle

- Solder pot contact
- Front mount

2012-1511-000 (Gold plated) **2012-7511-000** (Nickel plated)



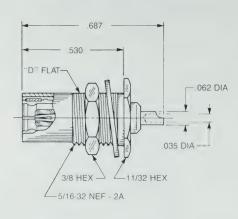




Straight Female Bulkhead Plug Receptacle • Solder pot contact

- Front mount

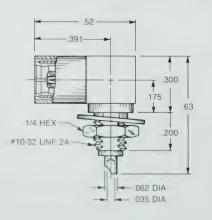
2017-1511-000 (Gold plated) 2017-7511-000 (Nickel plated)



Straight Female **Bulkhead Plug Receptacle**

- Solder pot contact
- Rear mount

2048-1511-000 (Gold plated) 2048-7511-000 (Nickel plated)



Right Angle Female **Bulkhead Plug Receptacle**

- Solder pot contact
- Front mount

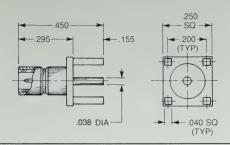
2097-1511-000 (Gold plated) 2097-7511-000 (Nickel plated)



Straight Male Jack Receptacle

2009-1511-000 (Gold plated) **2009-7511-000** (Nickel plated)

QPL version available (M39012/95)

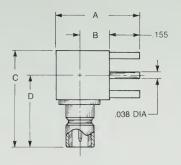


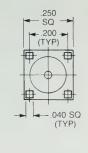
Right Angle Male Jack Receptacle

Α	В	С	D	
.43	.15	.50	.38	
2010-	2010-1511-000			ated)
2010-	7511-0	00 (Nickel p	lated)

Α	В	С	D	
.50	.215	.56	.437	
2010-	1511-0	02 (0	Gold pla	ated)
2010-	7511-0	02 (1	Nickel p	lated)

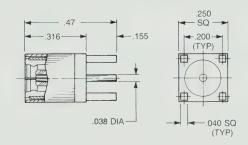
QPL version available (M39012/96)





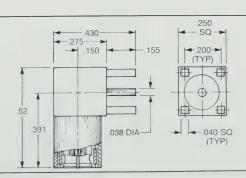
Straight Female Plug Receptacle

2025-1511-000 (Gold plated) 2025-7511-000 (Nickel plated)

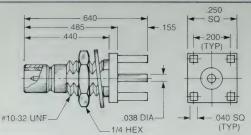


Right Angle Female Plug Receptacle

2042-1511-000 (Gold plated) **2042-7511-000** (Nickel plated)

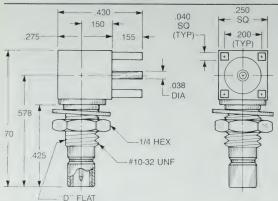






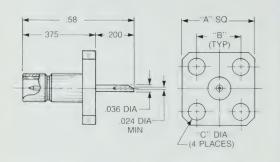
Bulkhead Mounted Straight Male Jack P.C. Board Receptacle

2109-1511-000 (Gold plated) 2109-7511-000 (Nickel plated)



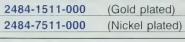
Bulkhead Mounted Right Angle Male Jack P.C. Board Receptacle

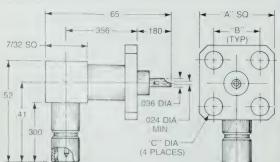
2110-1511-000 (Gold plated) 2110-7511-000 (Nickel plated)



Straight Male Panel Receptacle

A sq.	В	C dia.	
.500	.340	.102	
2486-1511-000		(Gold pla	ated)
2486-7511-000		(Nickel p	lated)
A sq.	В	C dia.	
.375	.232	.093	





Right Angle Male Panel Receptacle

A sq.	В	C dia.	
.500	.340	.102	
2490-1511-000		(Gold plated)	
2490-7511-000		(Nickel plated	1)
		0.1:-	

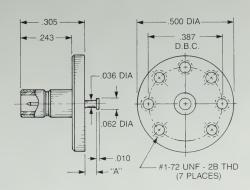
A sq.	В	C dia.	
.375	.232	.093	
2488-15	11-000	(Gold pla	ated)
2488-75	11-000	(Nickel p	lated)

Straight Male Top Launch Jack

Non-captive contact

Dim. A Part number:

.031	2029-1211-001	(Gold plated)
	2029-7211-001	(Nickel plated)
.063	2029-1211-002	(Gold plated)
	2029-7211-002	(Nickel plated)
.125	2029-1211-003	(Gold plated)
	2029-7211-003	(Nickel plated)

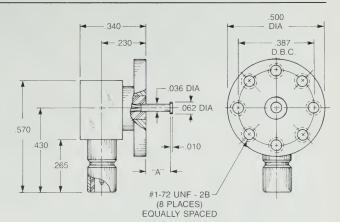


Right Angle Male Top Launch Jack

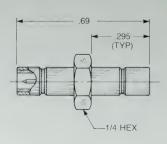
Removable rear contact

Dim. A Part number:

.031	2092-1511-001	(Gold plated)
	2092-7511-001	(Nickel plated)
.063	2092-1511-002	(Gold plated)
	2092-7511-002	(Nickel plated)
.125	2092-1511-003	(Gold plated)
	2092-7511-003	(Nickel plated)



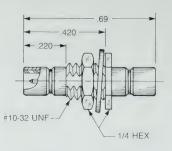




Straight Male Jack To Jack Adapter

Connects two plugs

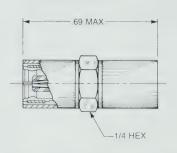
5213-1501-000 (Gold plated) **5213-7501-000** (Nickel plated)



Bulkhead Mounted Straight Male Jack To Jack Adapter

- · Connects two plugs
- For .093" max. panel

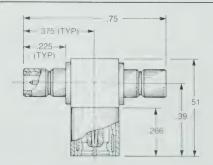
5222-1501-000 (Gold plated) **5222-7501-000** (Nickel plated)



Straight Female Plug To Plug Adapter

· Connects two jacks

5216-1501-000 (Gold plated) **5216-7501-000** (Nickel plated)



Tee Adapter (Unmatched Power Divider) Jack To Plug To Jack

· Connects two plugs and one jack

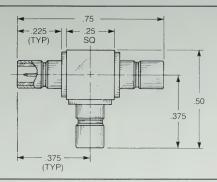
5215-1501-000 (Gold plated) **5215-7501-000** (Nickel plated)

RESISTIVE TERMINATIONS

Tee Adapter (Unmatched Power Divider) Jack To Jack To Jack

· Connects three plugs

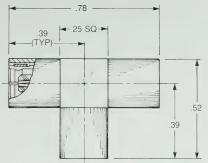
5207-1501-000 (Gold plated) **5207-7501-000** (Nickel plated)



Tee Adapter (Unmatched Power Divider) Plug To Plug To Plug

· Connects three jacks

5208-1501-000 (Gold plated) **5208-7501-000** (Nickel plated)



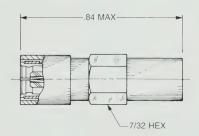
Female Plug Resistive Termination

(Dummy load)

Standard resistor: 51 ohm, 1/2 watt, 5% tolerance

2036-1511-051 (Gold plated) **2036-7511-051** (Nickel plated)

Available with other resistances.



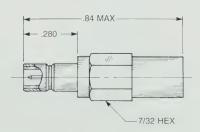
Male Jack Resistive Termination

(Dummy load)

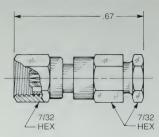
Standard resistor: 51 ohm, 1/2 watt, 5% tolerance

2037-1511-051 (Gold plated) **2037-7511-051** (Nickel plated)

Available with other resistances



STRAIGHT AND RIGHT ANGLE

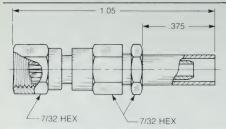


Straight Female Cable Plug

Clamp type for flexible cable: 1002-1551-0XX (Gold plated) 1002-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 1002-1541-0XX (Gold plated) 1002-7541-0XX (Nickel plated)

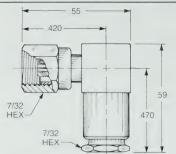
QPL version available (M39012/73)



Straight Female Cable Plug

Crimp type for flexible cable: 1002-1571-0XX (Gold plated) 1002-7571-0XX (Nickel plated)

QPL version available (M39012/73)

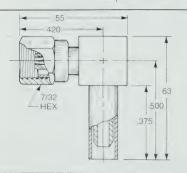


Right Angle Female Cable Plug

Clamp type for flexible cable: 1005-1551-0XX (Gold plated) 1005-7551-0XX (Nickel plated)

Solder-clamp for sem-rigid cable: 1005-1541-0XX (Gold plated) 1005-7541-0XX (Nickel plated)

QPL version available (M39012/75)



Right Angle Female Cable Plug

Crimp type for flexible cable: 1105-1521-0XX (Gold plated) 1105-7521-0XX (Nickel plated)

QPL version available (M39012/75)

	Substitute the app	propriate cable group for 'XX':
02	RG178, RG196, M17/93, M17/169	09 .141" semi-rigid, RG402, M17/130
03	RG174, RG179, RG316, M17/113,	10 .085" semi-rigid, RG405, M17/133
	M17/119, M17/172, M17/173	19 RG174DS, RG316DS,
05	RG178DS, RG196DS	M17/152, Times RD316

Straight Male Cable Jack

Clamp type for flexible cable:

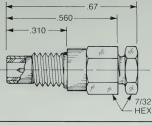
1001-1551-0XX (Gold plated)

1001-7551-0XX (Nickel plated)

QPL version

Solder-clamp for semi-rigid cable: 1001-1541-0XX (Gold plated) 1001-7541-0XX (Nickel plated)

available (M39012/74)



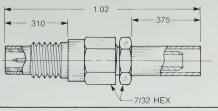
Straight Male Cable Jack

Crimp type for flexible cable:

1001-1571-0XX (Gold plated)

1001-7571-0XX (Nickel plated)

QPL version available (M39012/74)



Right Angle Male Cable Jack

Clamp type for flexible cable:

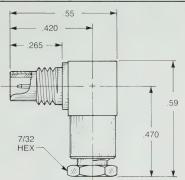
1041-1551-0XX (Gold plated)

1041-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable:

1041-1541-0XX (Gold plated)

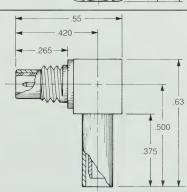
1041-7541-0XX (Nickel plated)



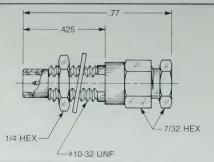
Right Angle Male Cable Jack

Crimp type for flexible cable: 1141-1521-0XX (Gold plated)

1141-7521-0XX (Nickel plated)



	Substitute the appropriate cable group for 'XX':				
02	RG178, RG196, M17/93, M17/169	09	.141" semi-rigid, RG402, M17/130		
03	RG174, RG179, RG316, M17/113,	10	.085" semi-rigid, RG405, M17/133		
	M17/119, M17/172, M17/173	19	RG174DS, RG316DS,		
05	RG178DS, RG196DS		M17/152, Times RD316		

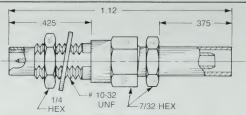


Straight Male Bulkhead Cable Jack

Clamp type for flexible cable: 1003-1551-0XX (Gold plated) 1003-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 1003-1541-0XX (Gold plated) 1003-7541-0XX (Nickel plated)

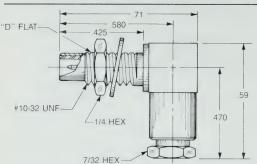
QPL version available (M39012/76)



Straight Male Bulkhead Cable Jack

Crimp type for flexible cable: 1003-1571-0XX (Gold plated) 1003-7571-0XX (Nickel plated)

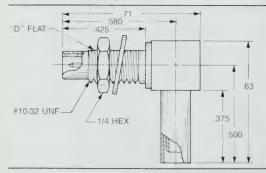
QPL version available (M39012/76)



Bulkhead Mounted Right Angle Male Cable Jack

Clamp type for flexible cable: 1006-1551-0XX (Gold plated) 1006-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 1006-1541-0XX (Gold plated) 1006-7541-0XX (Nickel plated)



Bulkhead Mounted Right Angle Male Cable Jack

Crimp type for flexible cable: 1106-1521-0XX (Gold plated) 1106-7521-0XX (Nickel plated)

Substitute the app	propriate cable group for 'XX':
02 RG178, RG196, M17/93, M17/169	09 .141" semi-rigid, RG402, M17/130
03 RG174, RG179, RG316, M17/113,	10 .085" semi-rigid, RG405, M17/133
M17/119, M17/172, M17/173	19 RG174DS, RG316DS,
05 RG178DS, RG196DS	M17/152, Times RD316

RECEPTACLES

BULKHEAD MOUNTED

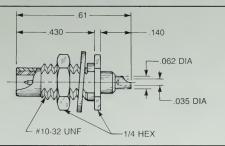
Straight Male Bulkhead Jack Receptacle

- Solder pot contact
- Rear mount

1004-1511-000 (Gold plated)

1004-7511-000 (Nickel plated)

QPL version available (M39012/77)



Straight Male Bulkhead Jack Receptacle

- Solder pot contact
- Front mount

1019-1511-000 (Gold plated)

1019-7511-000 (Nickel plated)

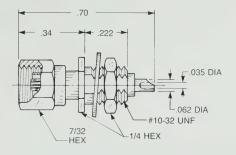
QPL version available (M39012/77)

.062 DIA .035 DIA .035 DIA .034 UNF

Straight Female Bulkhead Plug Receptacle

- Solder pot contact
- Front mount

1017-1511-000 (Gold plated) **1017-7511-000** (Nickel plated)

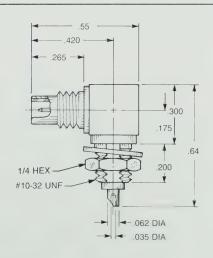


Right Angle Male Bulkhead Jack Receptacle

- Solder pot contact
- Front mount

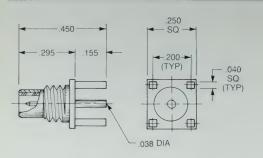
1012-1511-000 (Gold plated)

1012-7511-000 (Nickel plated)



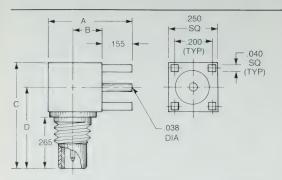
P.C. BOARD RECEPTACLES





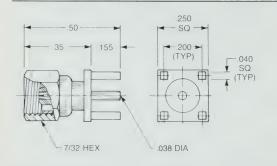
Straight Male Jack Receptacle

1009-1511-000 (Gold plated) 1009-7511-000 (Nickel plated)



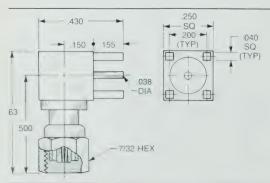
Right Angle Male Jack Receptacle

Α	В	С	D	
.43	.15	.55	.42	
1010-	1511-0	00 (Gold pla	ated)
1010-	7511-0	00 (1	Vickel p	lated)
Α	В	С	D	
.50	.215	.55	.42	
1010-	1511-0	01 (Gold pla	ated)
1010-	7511-0	01 (Nickel p	lated)



Straight Female Plug Receptacle

1025-1511-000 (Gold plated) **1025-7511-000** (Nickel plated)



Right Angle Female Plug Receptacle

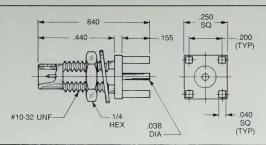
1042-1511-000 (Gold plated) **1042-7511-000** (Nickel plated)

P.C. BOARD AND PANEL RECEPTACLES



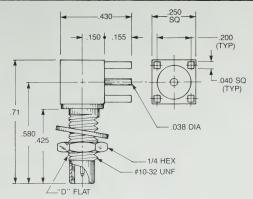
Bulkhead Mounted Straight Male Jack P.C. Board Receptacle

1109-1511-000 (Gold plated) 1109-7511-000 (Nickel plated)



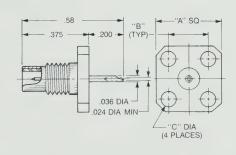
Bulkhead Mounted Right Angle Male Jack P.C. Board Receptacle

1110-1511-000 (Gold plated) **1110-7511-000** (Nickel plated)



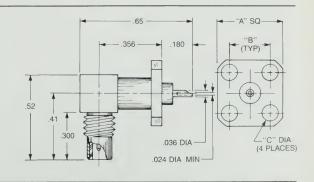
Straight Male Panel Receptacle

A sq.	В	C dia.	
.500	.340	.102	
1486-15	11-000	(Gold pla	ated)
1486-75	11-000	(Nickel p	lated)
A sq.	В	C dia.	
A sq. .375	B .232	C dia. .093	
	.232		ated)



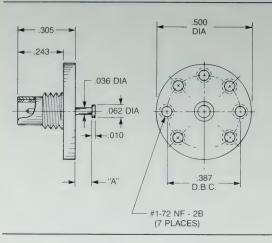
Right Angle Male Panel Receptacle

A sq.	В	C dia.	
.500	.340	.102	
1490-15	11-000	(Gold pla	ited)
1490-75	11-000	(Nickel p	lated)
A sq.	В	C dia.	
.375	.232	.093	
1488-15	11-000	(Gold pla	ited)
1488-75	11-000	(Nickel p	lated)



STRIPLINE RECEPTACLES

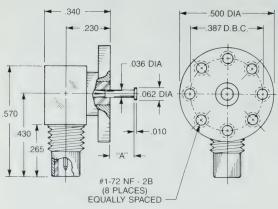




Straight Male Top Launch Jack

Non-captive contact

Dim. A	Part number	
.031	1029-1211-001	(Gold plated)
	1029-7211-001	(Nickel plated)
.063	1029-1211-002	(Gold plated)
	1029-7211-002	(Nickel plated)
.125	1029-1211-003	(Gold plated)
	1029-7211-003	(Nickel plated)



Right Angle Male Top Launch Jack

Removable rear contact

Dim. A	Part number	
.031	1092-1511-001	(Gold plated)
	1092-7511-001	(Nickel plated)
.063	1092-1511-002	(Gold plated)
	1092-7511-002	(Nickel plated)
.125	1092-1511-003	(Gold plated)
	1092-7511-003	(Nickel plated)



Straight Male Jack To Jack Adapter

Connects two plugs

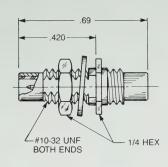
5813-1501-000 (Gold plated) **5813-7501-000** (Nickel plated)



Bulkhead Mounted Straight Male Jack To Jack Adapter

- · Connects two plugs
- For .093" max. panel

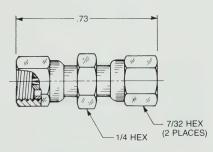
5822-1501-000 (Gold plated) **5822-7501-000** (Nickel plated)



Straight Female Plug To Plug Adapter

· Connects two jacks

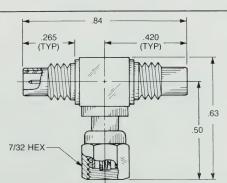
5816-1501-000 (Gold plated) **5816-7501-000** (Nickel plated)



Tee Adapter (Unmatched Power Divider) Jack To Plug To Jack

· Connects two plugs and one jack

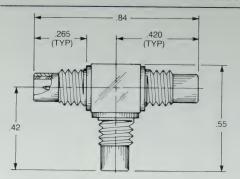
5815-1501-000 (Gold plated) **5815-7501-000** (Nickel plated)



ADAPTERS WITHIN SERIES



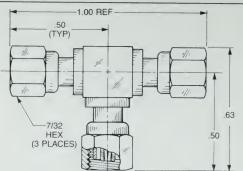
RESISTIVE TERMINATIONS



Tee Adapter (Unmatched Power Divider) Jack To Jack To Jack

Connects three plugs

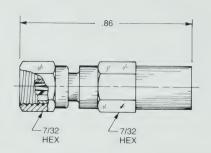
5807-1501-000 (Gold plated) 5807-7501-000 (Nickel plated)



Tee Adapter (Unmatched Power Divider) Plug To Plug To Plug

Connects three jacks

5808-1501-000 (Gold plated) 5808-7501-000 (Nickel plated)



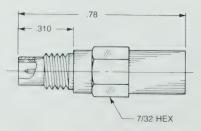
Female Plug Resistive Termination

(Dummy load)

Standard resistor: 51 ohm, 1/2 watt, 5% tolerance

1036-1511-051 (Gold plated) 1036-7511-051 (Nickel plated)

Available with other resistances



Male Jack Resistive Termination

(Dummy load)

Standard resistor: 51 ohm, 1/2 watt, 5% tolerance

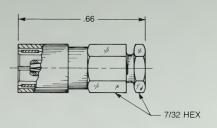
1037-1511-051 (Gold plated) 1037-7511-051 (Nickel plated)

Available with other resistances

Straight Female Cable Plug

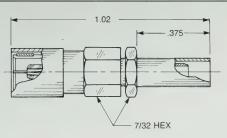
Clamp type for flexible cable: 3002-1551-0XX (Gold plated) 3002-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 3002-1541-0XX (Gold plated) 3002-7541-0XX (Nickel plated)



Straight Female Cable Plug

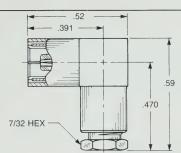
Crimp type for flexible cable: 3002-1571-0XX (Gold plated) 3002-7571-0XX (Nickel plated)



Right Angle Female Cable Plug

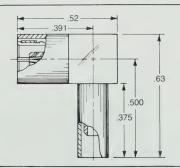
Clamp type for flexible cable: 3005-1551-0XX (Gold plated) 3005-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 3005-1541-0XX (Gold plated) 3005-7541-0XX (Nickel plated)



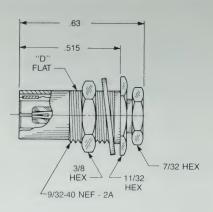
Right Angle Female Cable Plug

Crimp type for flexible cable: 3105-1521-0XX (Gold plated) 3105-7521-0XX (Nickel plated)



	Substitute the app	propriate cable group for 'XX':
02	RG178, RG196, M17/93, M17/169	09 .141" semi-rigid, RG402, M17/130
03	RG174, RG179, RG316, M17/113,	10 .085" semi-rigid, RG405, M17/133
	M17/119, M17/172, M17/173	19 RG174DS, RG316DS,
05	RG178DS, RG196DS	M17/152, Times RD316



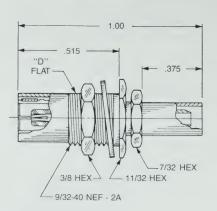


Bulkhead Mounted Straight Female Cable Plug

Clamp type for flexible cable: 3028-1551-0XX (Gold plated) 3028-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 3028-1541-0XX (Gold plated) 3028-7541-0XX (Nickel plated)

See page 92 for float-mount version



Bulkhead Mounted Straight Female Cable Plug

Crimp type for flexible cable: 3028-1571-0XX (Gold plated) 3028-7571-0XX (Nickel plated)

See page 92 for float-mount version

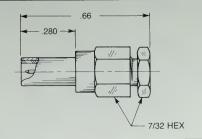
Substitute the app	propriate cable group for 'XX':
02 RG178, RG196, M17/93, M17/169	09 .141" semi-rigid, RG402, M17/130
03 RG174, RG179, RG316, M17/113,	10 .085" semi-rigid, RG405, M17/133
M17/119, M17/172, M17/173	19 RG174DS, RG316DS,
05 RG178DS, RG196DS	M17/152, Times RD316



Straight Male Cable Jack

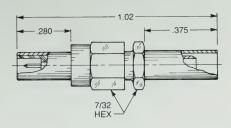
Clamp type for flexible cable: 3001-1551-0XX (Gold plated) 3001-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 3001-1541-0XX (Gold Plated) 3001-7541-0XX (Nickel plated)



Straight Male Cable Jack

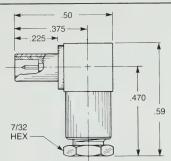
Crimp type for flexible cable: 3001-1571-0XX (Gold plated) 3001-7571-0XX (Nickel plated)



Right Angle Male Cable Jack

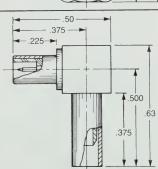
Clamp type for flexible cable: 3041-1551-0XX (Gold plated) 3041-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 3041-1541-0XX (Gold plated) 3041-7541-0XX (Nickel plated)

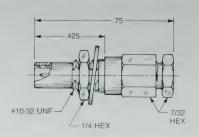


Right Angle Male Cable Jack

Crimp type for flexible cable: 3141-1521-0XX (Gold plated) 3141-7521-0XX (Nickel plated)



	Substitute the appropria	ate cab	ole group for 'XX':
02	RG178, RG196, M17/93, M17/169	09	.141" semi-rigid, RG402, M17/130
03	RG174, RG179, RG316, M17/113,	10	.085" semi-rigid, RG405, M17/133
	M17/119, M17/172, M17/173	19	RG174DS, RG316DS,
05	RG178DS, RG196DS		M17/152, Times RD316

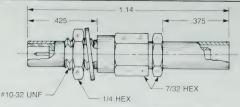


Straight Male Bulkhead Cable Jack

Clamp type for flexible cable: 3003-1551-0XX (Gold plated) 3003-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 3003-1541-0XX (Gold plated) 3003-7541-0XX (Nickel plated)

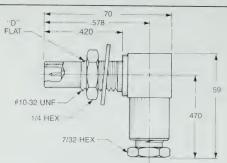
See page 93 for float-mount version



Straight Male Bulkhead Cable Jack

Crimp type for flexible cable: 3003-1571-0XX (Gold plated) 3003-7571-0XX (Nickel plated)

See page 93 for float-mount version

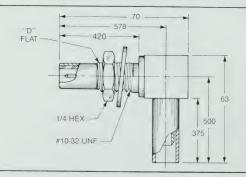


Right Angle Male Bulkhead Cable Jack

Clamp type for flexible cable: 3006-1551-0XX (Gold plated) 3006-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 3006-1541-0XX (Gold plated) 3006-7541-0XX (Nickel plated)

See page 94 for float-mount version



Right Angle Male Bulkhead Cable Jack

Crimp type for flexible cable: 3106-1521-0XX (Gold plated) 3106-7521-0XX (Nickel plated)

See page 94 for float-mount version

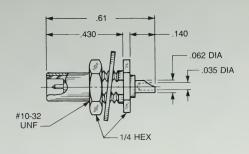
S	substitute the app	ropriate cable group for 'XX':
02 RG178, RG196, M17/93,	M17/169	09 .141" semi-rigid, RG402, M17/130
03 RG174, RG179, RG316,	M17/113,	10 .085" semi-rigid, RG405, M17/133
M17/119, M17/172, M17/	173	19 RG174DS, RG316DS,
05 RG178DS, RG196DS		M17/152, Times RD316

Straight Male Bulkhead Jack Receptacle

- · Solder pot contact
- Rear mount

3004-1511-000 (Gold plated) 3004-7511-000 (Nickel plated)

See page 95 for float-mount version

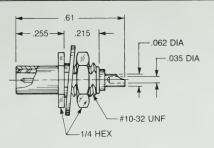


Straight Male Bulkhead Jack Receptacle

- Solder pot contact
- Front mount

3019-1511-000 (Gold plated) **3019-7511-000** (Nickel plated)

See page 95 for float-mount version

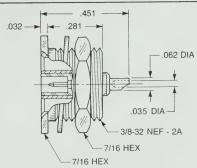


Straight Male Bulkhead Jack Receptacle

- Solder pot contact
- · Recessed front mount

3014-1511-000 (Gold plated) **3014-7511-000** (Nickel plated)

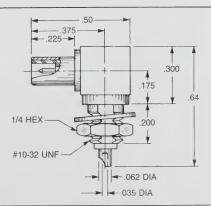
See page 95 for float-mount version



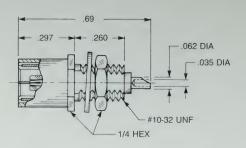
Right Angle Male Bulkhead Jack Receptacle

- Solder pot contact
- · Front mount

3012-1511-000 (Gold plated) **3012-7511-000** (Nickel plated)





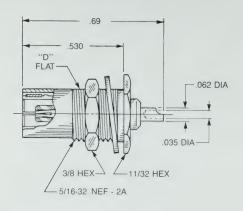


Straight Female Bulkhead Plug Receptacle

- Solder pot contact
- Front mount

3017-1511-000 (Gold plated) **3017-7511-000** (Nickel plated)

See page 96 for float-mount version

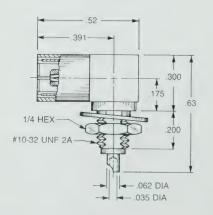


Straight Female Bulkhead Plug Receptacle

- Solder pot contact
- Rear mount

3048-1511-000 (Gold plated) **3048-7511-000** (Nickel plated)

See page 96 for float-mount version



Right Angle Female Bulkhead Plug Receptacle

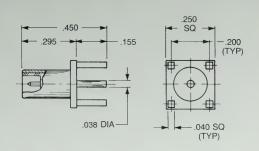
- Solder pot contact
- Front mount

3097-1511-000 (Gold plated) 3097-7511-000 (Nickel plated)



Straight Male Jack Receptacle

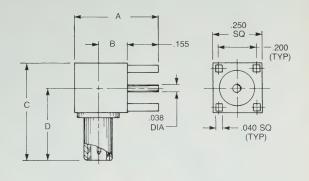
3009-1511-000 (Gold plated) **3009-7511-000** (Nickel plated)



Right Angle Male Jack Receptacle

Α	В	С	D	
.43	.15	.50	.38	
3010-	1511-0	00 (Gold pla	ated)
3010-	7511-0	00 (Nickel p	lated)

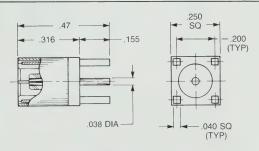
	Α	В	С	D	
۱	.50	.215	.56	.437	
1	3010-	1511-0	03 (0	Gold pla	ated)
	3010-	7511-0	1)	Nickel p	lated)



Straight Female Plug Receptacle

3025-1511-000 (Gold plated) **3025-7511-000** (Nickel plated)

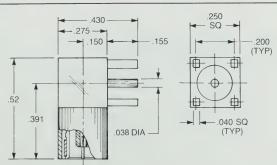
See page 97 for blind-mate version



Right Angle Female Plug Receptacle

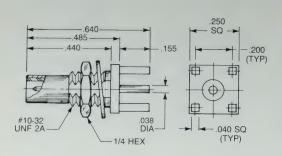
3042-1511-000 (Gold plated) **3042-7511-000** (Nickel plated)

See page 97 for blind-mate version



P.C. BOARD RECEPTACLES

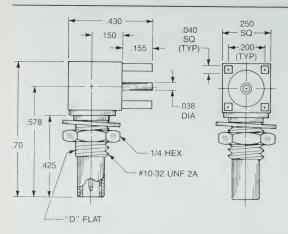
ADAPTERS



Bulkhead Mounted Straight Male Jack P.C. Board Receptacle

3109-1511-000 (Gold plated) 3109-7511-000 (Nickel plated)

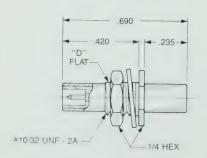
See page 97 for float-mount version



Bulkhead Mounted Right Angle Male Jack P.C. Board Receptacle

3110-1511-000 (Gold plated) 3110-7511-000 (Nickel plated)

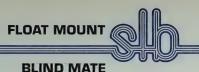
See page 97 for float-mount version



Bulkhead Mounted Straight Male Jack to Jack Adapter

5252-1501-000 (Gold plated) 5252-7501-000 (Nickel plated)

See page 96 for float-mount version



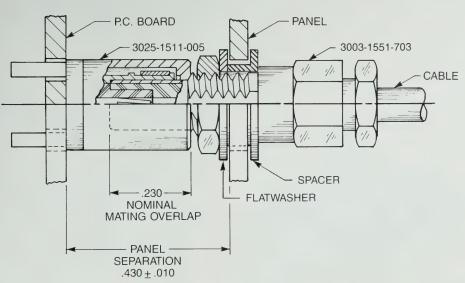
AEP SLB series connectors can provide a low-cost alternative to other float mount/blind mate connector systems in applications below 4 GHz.

The radial float of the panel mounted connectors, combined with the closed-entry mating end hood of the plugs, allows the mating pairs to be misaligned up to about .025" without damage occurring during mating. Since the axial float is not spring-loaded, panel-to-panel separation should be maintained within \pm .010".

Mating force per connector is 3 pounds maximum, and unmating force is 8 ounces minimum. External actuators, such as levers or jackscrews, should be considered in applications requiring simultaneous mating of multiple connector pairs, especially when one side is P.C. board mounted.

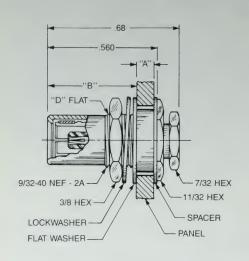
We recommend that only one side of the mating pair be float mounted.

MATING DETAIL, 3025-1511-005 AND 3003-1551-703



To determine panel separation: Add projection from panel or P.C. board for each connector used and subtract mating overlap (.230). Projection for each connector is shown on product pages, and is with all axial float loaded toward panel. Axial float is .008" for all items. Lockwasher is not included with connectors for .093" panel.

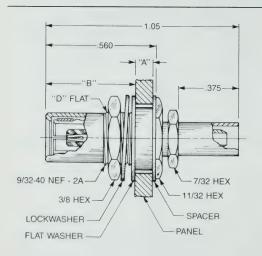
Radial float: When desired float is determined, drill panel to .230" diameter plus float amount.



Bulkhead Mounted Straight Female Cable Plug Float Mount/Blind Mate

Closed-entry mating end hood

Dim. A	Dim. B	Clamp type for fl	exible cable:
.031	.500	3028-1551-5XX	(Gold plated)
		3028-7551-5XX	(Nickel plated)
.062	.469	3028-1551-6XX	(Gold plated)
		3028-7551-6XX	(Nickel plated)
.093	.438	3028-1551-7XX	(Gold plated)
		3028-7551-7XX	(Nickel plated)
D: A	D: D	0-1-1	
Dim. A	Dim. B	Solder-clamp for	semi-rigid cable:
Dim. A .031	Dim. B .500	Solder-clamp for 3028-1541-5XX	
		·	(Gold plated)
		3028-1541-5XX	(Gold plated) (Nickel plated)
.031	.500	3028-1541-5XX 3028-7541-5XX	(Gold plated) (Nickel plated) (Gold plated)
.031	.500	3028-1541-5XX 3028-7541-5XX 3028-1541-6XX	(Gold plated) (Nickel plated) (Gold plated) (Nickel plated)



Bulkhead Mounted Straight Female Cable Plug Float Mount/Blind Mate

Closed-entry mating end hood

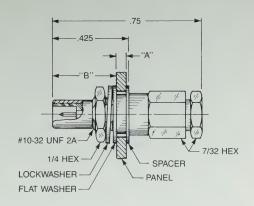
Dim. A	Dim. B	Crimp type for flexible cable:	
.031	.500	3028-1571-5XX	(Gold plated)
		3028-7571-5XX	(Nickel plated)
.062	.469	3028-1571-6XX	(Gold plated)
		3028-7571-6XX	(Nickel plated)
.093	.438	3028-1571-7XX	(Gold plated)
		3028-7571-7XX	(Nickel plated)

Substitute the	appropriate cable group for 'XX':
02 RG178, RG196, M17/93, M17/169	09 .141" semi-rigid, RG402, M17/130
03 RG174, RG179, RG316, M17/113,	10 .085" semi-rigid, RG405, M17/133
M17/119, M17/172, M17/173	19 RG174DS, RG316DS,
05 RG178DS, RG196DS	M17/152, Times RD316



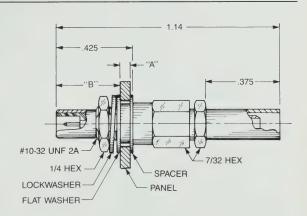
Float Mount Straight Male Bulkhead Cable Jack

Dim. A	Dim. B	Clamp type for flexible cable:	
.031	.365	3003-1551-5XX	(Gold plated)
		3003-7551-5XX	(Nickel plated)
.062	.334	3003-1551-6XX	(Gold plated)
		3003-7551-6XX	(Nickel plated)
.093	.303	3003-1551-7XX	(Gold plated)
		3003-7551-7XX	(Nickel plated)
Dim. A	Dim. B	Solder-clamp for	semi-rigid cable:
Dim. A	Dim. B .365	· ·	9
		· ·	9
		3003-1541-5XX	(Gold plated)
.031	.365	3003-1541-5XX 3003-7541-5XX	(Gold plated) (Nickel plated)
.031	.365	3003-1541-5XX 3003-7541-5XX 3003-1541-6XX	(Gold plated) (Nickel plated) (Gold plated)



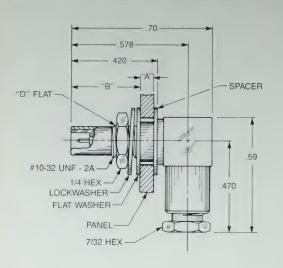
Float Mount Straight Male Bulkhead Cable Jack

Dim. A	Dim. B	Crimp type for flexible cable:	
.031	.365	3003-1571-5XX	(Gold plated)
		3003-7571-5XX	(Nickel plated)
.062	.334	3003-1571-6XX	(Gold plated)
		3003-7571-6XX	(Nickel plated)
.093	.303	3003-1571-7XX	
		3003-7571-7XX	(Nickel plated)



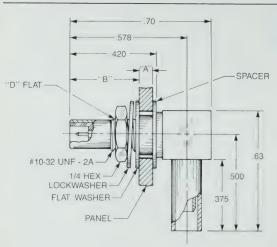
	Substitute the appropriate cable group for 'XX':			
02	RG178, RG196, M17/93, M17/169	09 .141" semi-rigid, RG402, M17/130		
03	RG174, RG179, RG316, M17/113,	10 .085" semi-rigid, RG405, M17/133		
M17/119, M17/172, M17/173 19 RG174DS, RG316DS,		19 RG174DS, RG316DS,		
05	RG178DS, RG196DS	M17/152, Times RD316		





Float Mount Right Angle Male Bulkhead Cable Jack

Dim. A	Dim. B	Clamp type for fl	exible cable:
.031	.360	3006-1551-5XX	' '
		3006-7551-5XX	'
.062	.329	3006-1551-6XX	
.093	298	3006-7551-6XX	, , , , ,
.093	.290	3006-1551-7XX 3006-7551-7XX	' '
		3006-7551-788	(INICKEI Plateu)
Dim. A	Dim. B	Solder-clamp for	semi-rigid cable
Dim. A .031	Dim. B .360	Solder-clamp for 3006-1541-5XX	-
	.360	· ·	(Gold plated)
		3006-1541-5XX 3006-7541-5XX 3006-1541-6XX	(Gold plated) (Nickel plated) (Gold plated)
.031	.360	3006-1541-5XX 3006-7541-5XX 3006-1541-6XX 3006-7541-6XX	(Gold plated) (Nickel plated) (Gold plated) (Nickel plated)
.031	.360	3006-1541-5XX 3006-7541-5XX 3006-1541-6XX	(Gold plated) (Nickel plated) (Gold plated) (Nickel plated) (Gold plated)



Float Mount Right Angle Male Bulkhead Cable Jack

Dim. A	Dim. B	Crimp type for fle	exible cable:
.031	.360	3106-1521-5XX	(Gold plated)
		3106-7521-5XX	(Nickel plated)
.062	.329	3106-1521-6XX	(Gold plated)
		3106-7521-6XX	(Nickel plated)
.093	.298	3106-1521-7XX	(Gold plated)
		3106-7521-7XX	(Nickel plated)

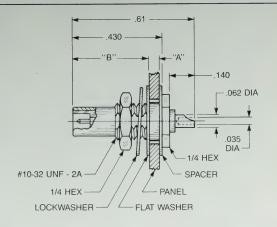
Substitute the ap	propriate cable group for 'XX':
02 RG178, RG196, M17/93, M17/169	09 .141" semi-rigid, RG402, M17/130
03 RG174, RG179, RG316, M17/113,	10 .085" semi-rigid, RG405, M17/133
M17/119, M17/172, M17/173	19 RG174DS, RG316DS,
05 RG178DS, RG196DS	M17/152, Times RD316



Float Mount Straight Male Bulkhead Jack Receptacle

- Solder pot contact
- Rear mount

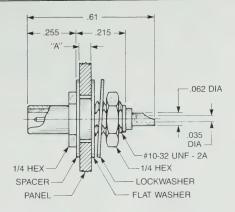
Dim. A	Dim. B		
.031	.370	3004-1511-500	(Gold plated)
		3004-7511-500	(Nickel plated)
.062	.339		(Gold plated)
		3004-7511-600	(Nickel plated)
.093	.308	3004-1511-700	(Gold plated)
		3004-7511-700	(Nickel plated)



Float Mount Straight Male Bulkhead Jack Receptacle

- Solder pot contact
- Front mount

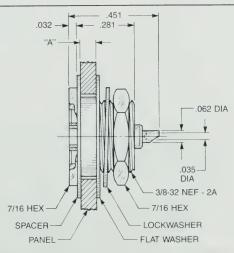
Dim. A		
.031	3019-1511-500	(Gold plated)
	3019-7511-500	(Nickel plated)
.062	3019-1511-600	(Gold plated)
	3019-7511-600	(Nickel plated)
.093	3019-1511-700	(Gold plated)
	3019-7511-700	(Nickel plated)

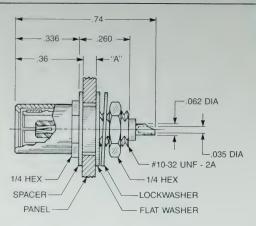


Float Mount Straight Male Bulkhead Jack Receptacle

- Solder pot contact
- · Recessed front mount

Dim. A		
.031	3014-1511-500	(Gold plated)
	3014-7511-500	(Nickel plated)
.062	3014-1511-600	(Gold plated)
	3014-7511-600	(Nickel plated)
.093	3014-1511-700	(Gold plated)
	3014-7511-700	(Nickel plated)

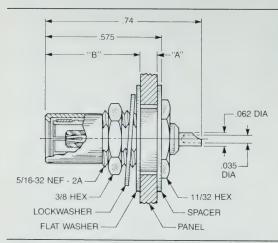




Float Mount Straight Female Bulkhead Plug Receptacle

- Solder pot contact
- Front mount
- · Closed-entry mating end hood

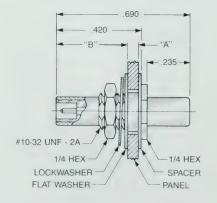
Dim. A		
.031	3017-1511-500	(Gold plated)
	3017-7511-500	(Nickel plated)
.062	3017-1511-600	(Gold plated)
	3017-7511-600	(Nickel plated)
.093	3017-1511-700	(Gold plated)
	3017-7511-700	(Nickel plated)



Float Mount Straight Female Bulkhead Plug Receptacle

- Solder pot contact
- Rear mount
- · Closed-entry mating end hood

Dim. A	Dim. B		
.031	.515	3048-1511-500	(Gold plated)
		3048-7511-500	
.062	.484	3048-1511-600	
		3048-7511-600	
.093	.453	3048-1511-700	
		3048-7511-700	(Nickel plated)



Float Mount Straight Male Jack To Jack Adapter

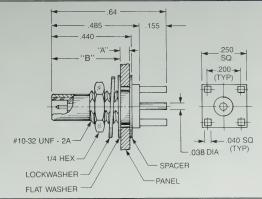
· Connects two plugs

Dim. A	Dim. B		
.031	.360	5252-1501-500	(Gold plated)
		5252-7501-500	
.062	.329	5252-1501-600	
		5252-7501-600	
.093	.298	5252-1501-700	(Gold plated)
		5252-7501-700	(Nickel plated)



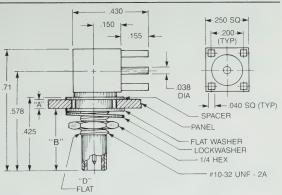
Float Mount Straight Male Jack P.C. Board Receptacle

Dim. A	Dim. B		
.031	.380	3109-1511-500	(Gold plated)
		3109-7511-500	(Nickel plated)
.062	.349	3109-1511-600	
		3109-7511-600	(Nickel plated)
.093	.318	3109-1511-700	
		3109-7511-700	(Nickel plated)



Float Mount Right Angle Male Jack P.C. Board Receptacle

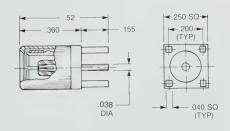
	Dim. A	Dim. B		
	.031	.365	3110-1511-500	(Gold plated)
			3110-7511-500	(Nickel plated)
ı	.062	.334	3110-1511-600	(Gold plated)
,			3110-7511-600	(Nickel plated)
	.093	.303	3110-1511-700	(Gold plated)
			3110-7511-700	(Nickel plated)



Straight Female Plug P.C. Board Receptacle

Closed-entry mating end hood

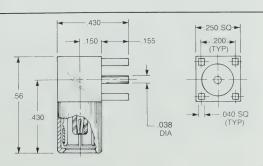
3025-1511-005 (Gold plated) **3025-7511-005** (Nickel plated)



Right Angle Female Plug P.C. Board Receptacle

· Closed-entry mating end hood

3042-1511-006 (Gold plated) **3042-7511-006** (Nickel plated)







With AEP SSMB and SSMC series microminiature connectors, having to trade reliability for small size is no longer a design consideration. These rugged little connectors have been tested to 1,000 mating cycles with no change in insertion loss or mating forces. They have also passed all MIL-C-39012 qualification parameters for SMB connectors.

The key to this reliability is our use of beryllium copper outer contacts in plug connectors, and closed entry female contacts.

The standard mating design for SSMB and SSMC series connectors are similar to SMB and SMC but with size reduced approximately one-third. This makes them ideal for use in confined areas where the use of wrenches is not practica. Pages 111 and 112 show a group of plugs with slide-on mating for use where multiple connector dairs must be mated simultaneously.

These connectors have gained wide acceptance and usage in military radio systems, where small size is needed for miniaturization but ruggedness and reliability are paramount.

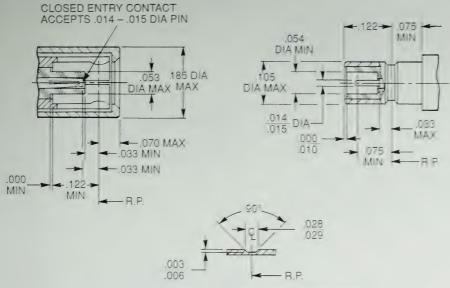
Because of the SSMB and SSMC series' small size and tight tolerance, finishes other than gold plating are not recommended.

Factory-oullt cable assemblies using these connectors are available from AEP. The index listing for each connector shows the appropriate cable assembly instruction. Assembly instructions start on page 142.





INTERFACE DIMENSIONS



SSLB identical to above except without detent.

SPECIFICATIONS MIL-C-39012C

Body components, center contacts: Beryllium copper per QQ-C-530, condition HT per MIL-H-7199 Insulators: Teflon TFE per ASTM-D-1710.

Finish:

Center Contacts: Gold plated per MIL-G-45204. Type II, class 1, grade C. All other parts finished to meet MIL-C-39012 corrosion requirements.

Electrical:

Impedance: 50 ohms.

Frequency range: DC-12.4 GHz.

Voltage rating: 250 VRMS, sea level 60 VRMS, 70.000 ft. Insulation resistance: 1000 megohms minimum.

VSWR:

Straight connector:

RG178: 1.25 + (.020 x F[GHz]) RG316: 1.30 + (.020 x F[GHz])

.085" SR: 1.25 + (.015 x F[GHz])

Right angle connector:

RG178: 1.25 + (.030 x F[GHz])

RG316: 1.30 + (.030 x F[GHz])

.085" SR: 1.25 + (.025 x F[GHz])

Contact resistance:

Center: 4.0 milliohms max initial

6.0 milliohms max after environment.

Outer contact: 1.0 millionms max initia.

1.5 milliohms max after environment. Braid to body: 1.0 milliohms max inta

N. A after environment.

Corona level: 125V @ 70,000 ft. RF highpot: 400 VRMS @ 5 M-z

RF leakage: -40 dB min @ 2-3 GHz

Insertion loss: 30 dB max @ * 5 GHz

Mechanical:

Force to engage:

SSMB: Initial - 6 lbs max engagement.

2 lbs min disengagement.

After 500 matings - 6 lbs max engagement

1 lb min disengagement.

SSLB: Initial - 6 lbs max engagement.

2 lbs min disengagement.

Contact retention: 2 lbs min axial force.

Durability: 500 mating cycles

Environmental: (per MIL-STD-202)

Temperature rating: -65° C to +165° C

Corrosion: Method 101, condition B. 59: sait solution

Vibration: Method 204.

SSMB, condition B (1.5G).

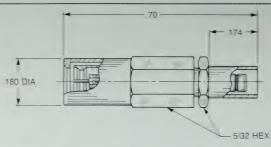
SSLB, condition A (10G).

Mechanical shock: Method 213.

SSMB, condition B: 75 G @ 6 ms @ 12 sne

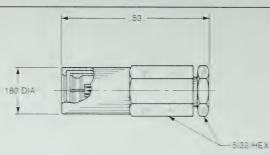
SSLB. N.A.

CABLE PLUGS



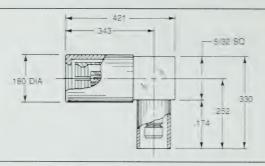
Straight Plug

Crimp type for flexible cable: 7202-1572-0XX



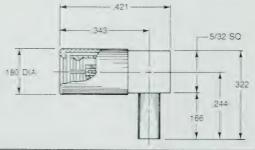
Straight Plug

Solder type for semi-rigid: 7202-1542-0XX



Right Angle Plug

Crimp type for flexible cable: 7405-1521-0XX



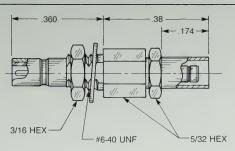
Right Angle Plug

Solder type for semi-rigid: 7405-1561-0XX

Substitute the appropriate cable group for 'XX':			
02	RG178, RG196, M17/93, M17/169	10	.085" semi-rigid, RG405, M17/133
03	RG174, RG179, RG316, M17/113,	11	.047° semi-rigid, M17/151
	M17/119, M17/172, M17/173	19	RG174DS, RG316DS, M17/152, Times RD316
05	RG178DS, RG196DS	21	.056° semi-rigid

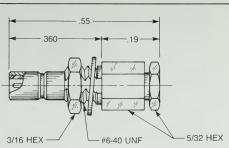
Straight Bulkhead Jack

Crimp type for flexible cable: 7203-1571-0XX



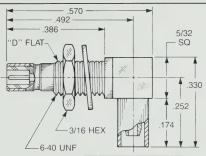
Straight Bulkhead Jack

Solder type for semi-rigid: **7203-1541-0XX**



Right Angle Bulkhead Jack

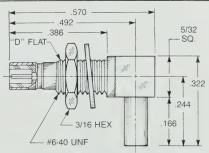
Crimp type for flexible cable: 7406-1521-0XX



Right Angle Bulkhead Jack

RG178DS, RG196DS

Solder type for semi-rigid: 7406-1561-0XX



Substitute the approp	riate cable group for 'XX':
02 RG178, RG196, M17/93, M17/169	10 .085" semi-rigid, RG405, M17/133
03 RG174, RG179, RG316, M17/113,	11 .047" semi-rigid, M17/151
M17/119 M17/172 M17/173	19 RG174DS, RG316DS, M17/152, Times RD316

21

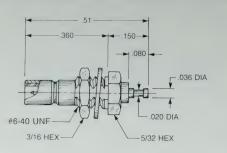
.056" semi-rigid

AEP

05

BULKHEAD RECEPTACLES

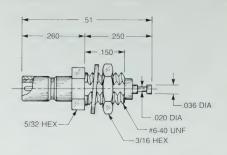




Straight Bulkhead Jack Receptacle

- Turret contact
- Rear mount

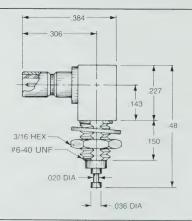
7204-1511-000



Straight Bulkhead Jack Receptacle

- Turret contact
- Front mount

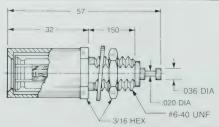
7219-1511-000



Right Angle Bulkhead Jack Receptacle

- Turret contact
- Front mount

7212-1511-000



Straight Bulkhead Plug Receptacle

- Turret contact
- Front mount

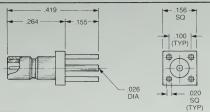
7217-1512-000

P.C. BOARD RECEPTACLES



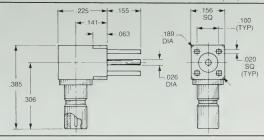
Straight Jack

7209-1511-000



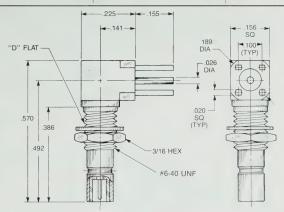
Right Angle Jack

7210-1511-000



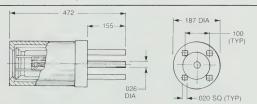
Right Angle Bulkhead Jack

7410-1511-000



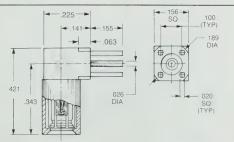
Straight Plug

7225-1512-000



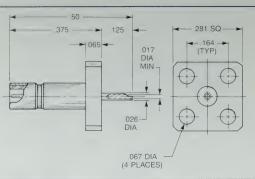
Right Angle Plug

7242-1511-000



RECEPTACLES AND ADAPTERS

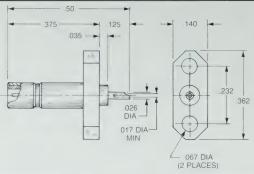




Straight Panel Receptacle

- Solder pot contact
- · Stainless steel body

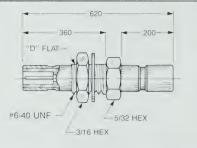
Square flange: **7498-1511-000**



Straight Panel Receptacle

- Solder pot contact
- · Stainless steel body

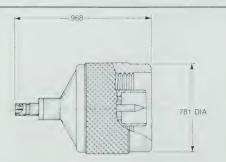
2-hole flange: **7499-1511-000**



Bulkhead Mounted Jack To Jack Adapter

· Connects two plugs

7222-1501-000

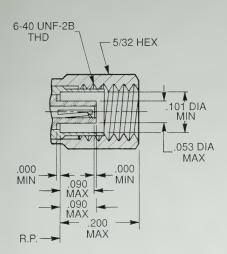


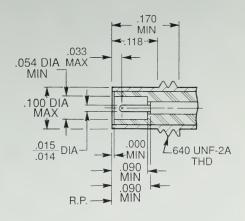
Precision Type N Plug To SSMB Series Jack Adapter

5011-1503-000



INTERFACE DIMENSIONS





SPECIFICATIONS MIL-C-39012C

Materials:

Body components, center contacts: Beryllium copper per QQ-C-530, condition HT per MIL-H-7199. Insulators: Teflon TFE per ASTM-D-1710.

Finish:

Center Contacts: Gold plated per MIL-G-45204, Type II, class 1, grade C. All other parts finished to meet MIL-C-39012

Electrical:

Impedance: 50 ohms.

Frequency range: DC-12.4 GHz.

corrosion requirements.

Voltage rating: 250 VRMS, sea level 60 VRMS, 70,000 ft.

Insulation resistance: 1000 megohms minimum.

VSWR:

Straight connector:

RG178: 1.20 + (.020 x F[GHz]) RG316: 1.25 + (.020 x F[GHz]) .085" SR: 1.20 + (.015 x F[GHz])

Right angle connector:

RG178: 1.20 + (.030 x F[GHz]) RG316: 1.25 + (.030 x F[GHz]) .085" SR: 1.20 + (.025 x F[GHz])

Contact resistance:

Center: 4.0 milliohms max initial,
6.0 milliohms max after environment.
Outer contact: 1.0 milliohms max initial,
1.5 milliohms max after environment.
Braid to body: 1.0 milliohms max initial,
N/A after environment.

Corona level: 125V @ 70,000 ft. RF highpot: 400 VRMS @ 5 MHz. RF leakage: -50 dB min @ 2-3 GHz. Insertion loss: 30 dB max @ 1.5 GHz.

Mechanical:

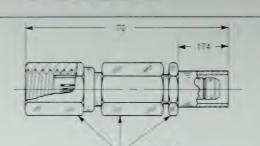
Force to engage: 16 inch-ounces torque max. Mating Torque 28-32 inch-ounces. Contact retention: 2 lbs min axial force. Coupling nut pulloff resistance: 25 lbs min. Durability: 500 mating cycles.

Environmental: (per MIL-STD-202)

Temperature rating: -65° C to +165°C. Corrosion: Method 101, condition B, 5% salt solution.

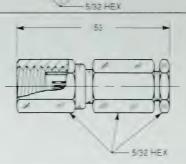
Vibration: Method 204, condition D (20 G) Mechanical shock: Method 213, condition B;

75 G @ 6 ms @ 1/2 sine.



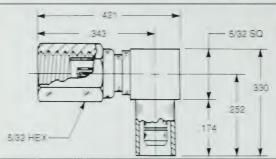
Straight Plug

Crimp type for flexible cable: 7002-1571-0XX



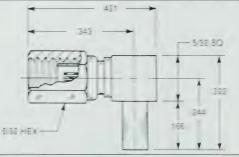
Straight Plug

Solder type for semi-rigid: 7002-1541-0XX



Right Angle Plug

Crimp type for flexible cable: 7105-1521-0XX



Right Angle Plug

Solder type for semi-rigid: 7105-1561-0XX

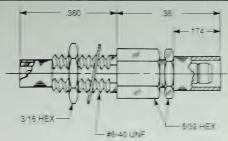
Substitute the appropriate cable group for 'XX':

- 12 FG178 FG198 M17 93 M17 169
- 13 RG174 RG179 RG316 M17.113
- M17 119 M171172 M171173
- E POITEDS POISEDS

- 10 _ .085° semi-rigid. RG405. M17/133
- 11 .047° semi-rigid. M17/151
- 19 RG174DS. RG316DS. M17/152. Times RD316
- 21 .056° semi-rigid

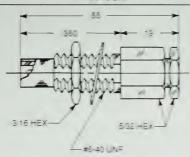
Straight Bulkhead Jack

Crimp type for flexible cable: 7003-1572-0XX



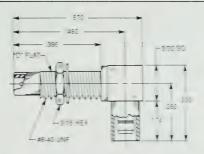
Straight Bulkhead Jack

Solder type for semi-rigid: 7003-1542-0XX



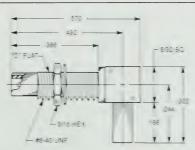
Right Angle Bulkhead Jack

Crimp type for flexible cable: 7106-1521-0XX



Right Angle Bulkhead Jack

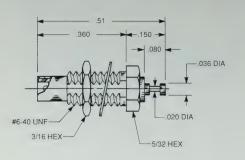
Solder type for semi-rigid: 7106-1561-0XX



	Substitute the appropriate cable group for 'XX':		
02	RG178, RG196, M17/93, M17/169	10 .085" semi-rigid, RG405, M17 133	
03	RG174, RG179, RG316, M17/113,	11 .047° semi-ngid, M17 151	
	M17/119, M17/172, M17/173	19 RG174DS, RG316DS, M17 152, Times RD316	
05	RG178DS. RG196DS	21 .056" semi-rigid	

BULKHEAD RECEPTACLES

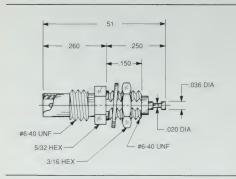




Straight Bulkhead Jack Receptacle

- Turret contact
- Rear mount

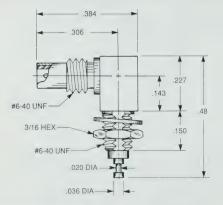
7004-1512-000



Straight Bulkhead Jack Receptacle

- Turret contact
- · Front mount

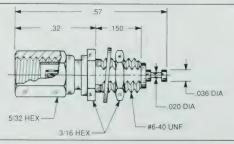
7119-1512-000



Right Angle Bulkhead Jack Receptacle

- · Turret contact
- Front mount

7012-1511-000



Right Angle Bulkhead Jack Receptacle

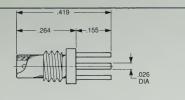
- Turret contact
- · Front mount

7017-1512-000

P.C. BOARD RECEPTACLES

Straight Jack

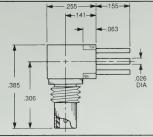
7009-1512-000

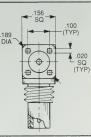




Right Angle Jack

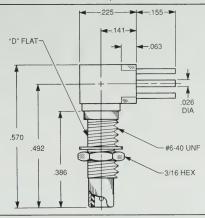
7010-1511-000

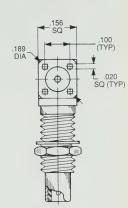




Right Angle Bulkhead Jack

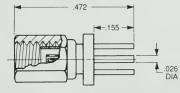
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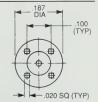




Straight Plug

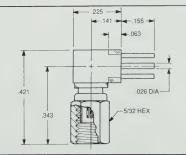
7025-1512-000

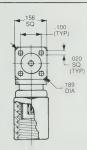




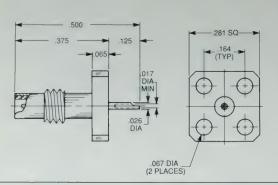
Right Angle Plug

7042-1511-000







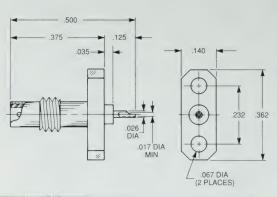


Straight Panel Receptacle

- Solder pot contact
- · Stainless steel body

Square flange:

7098-1513-000

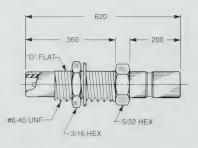


Straight Panel Receptacle

- Solder pot contact
- · Stainless steel body

2-hole flange:

7099-1513-000



Bulkhead Mounted SSMC Jack to SSMB Jack Adapter

· Connects SSMB plug and SSMC plug

7022-1502-000

SLIDE-ON MATING PLUGS



AEP SSMB series snap-on connectors were designed to provide the highest practical mating and unmating forces in microminiature size, making them the most rugged and reliable microminiature coaxial connectors available. This high mating force can, however, cause damage to bulkheads or P.C. boards when the connectors are mated in multiple pairs in rack and panel or blind-mate applications.

The slide-on plugs shown here were designed to reduce mating forces from 6 pounds maximum to 3 pounds maximum per pair, and unmating forces from 2 pounds minimum to 1/2 pound minimum per pair. These forces are high enough to ensure consistent outer conductor grounding, but low enough to allow the connectors to be used in multiple mating arrays.

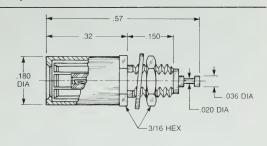
The use of external actuators, such as levers or jackscrews, should be considered in applications requiring the simultaneous mating of multiple connector pairs, especially when one side is P.C. board mounted.

These slide-on plugs will mate with any SSMB series snap-on jack.

SSLB Series Slide-One Bulkhead Plug Receptacle

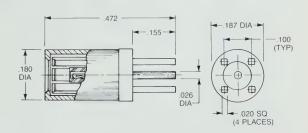
- Turret contact
- Front mount

7317-1512-000

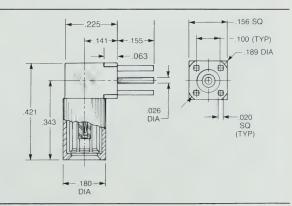


SSLB Series Slide-One Straight P.C. Board Plug

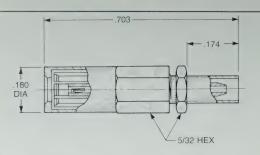
7325-1512-000



SSLB Series Slide-On Right Angle P.C. Board Plug 7342-1511-000

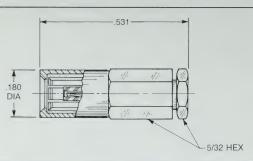






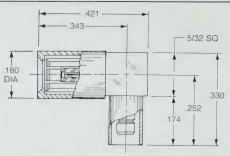
Straight Plug

Crimp type for flexible cable: 7302-1572-0XX



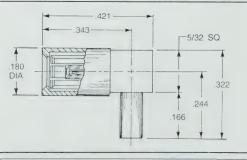
Straight Plug

Solder type for semi-rigid: 7302-1542-0XX



Right Angle Plug

Crimp type for flexible cable: 7305-1521-0XX



Right Angle Plug

Solder type for semi-rigid: **7305-1561-0XX**

Substitute the appropriate cable group for 'XX':			ĺ
02	RG178, RG196, M17/93, M17/169	10 .085" semi-rigid, RG405, M17/133	
03	RG174, RG179, RG316, M17/113,	11 .047" semi-rigid, M17/151	
	M17/119, M17/172, M17/173	19 RG174DS, RG316DS, M17/152, Times RD316	
05	RG178DS, RG196DS	21 .056" semi-rigid	



The 75 ohm connectors shown on the following pages provide matched impedance for critical applications such as CATV or telecom. The screw-on interface is similar in configuration to SMC, and the snap-on interface is similar in configuration to SMB. The cable attachment methods are the same as shown on page 62.

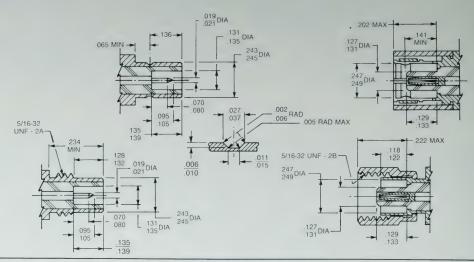
Standard cables for use with these connectors are shown at the bottom of the appropriate product pages. A complete listing of cable groups is on page 145. All the items shown are available with either gold or nickel plated bodies; part numbers for each finish are shown on the product pages. The index listing shows the appropriate cable assembly instruction. Assembly instructions start on page 148.

Factory-built cable assemblies using these connectors are available from AEP.





INTERFACE DIMENSIONS



SPECIFICATIONS

Materials:

Body components, male contacts & nuts —
Brass QQ-B-626, Comp. 22, 1/2 hard.
Spring Contacts — Beryllium copper, QQ-C-530.
Insulators — TFE per ASTM-D-1710.
Lockwashers — Phosphor Bronze, QQ-B-750.

Finishes:

Center contacts: gold plated per MIL-G-45204,
Type II, Class 1, Grade C.

Other metal parts: gold plated per MIL-G-45204, Type II, Class 1, Grade C, over Copper per MIL-C-14550, Class 4 or per customer specifications.

Electrical:

Impedance: 75 ohms, nominal.

Frequency: 0 to 2 GHz

Voltage Rating (max): Sea Level 65 VRMS,

70,000 Feet, 160 VRMS

Voltage Drop: 4 millivolts max. at 1 amp.

including mating connector.

Insulation Resistance: 1000 megohms (min.)

Contact Resistance: (Milliohms max.)

Initial	STRAIGHT	RT. ANGLE
Center	6.0	12.0
Outer Contact	1.0	1.0
Braid to Body	1.0	1.0

Dielectric Withstanding Voltage (Sea Level) 75 ohm conn. for RG-180B/U cable, 2000 VRMS

Corona Level: at 70,000 ft. altitude (min.) 75 ohm conn. for RG-180B/U Cable, 350 VOLTS

R.F. High Potential Voltage: Frequency 5MHz 75 ohm conn. for RG-180B/U cable, 1000 VRMS

R.F. Leakage: dB min. @ 2 to 3 GHz: SNAP-ON, 55; SCREW-ON, 60

Insertion Loss: (dB) max. @ 1.5 GHz: STRAIGHT, 0.30; RIGHT ANGLE, 0.60.

Mating Characteristics:

Interface design: Interchangeable with leading manufacturers.

Engagement Force: SNAP-ON SCREW-ON Longitudinal force 14 lbs. max. N.A. Torque N.A. 90 inch oz.

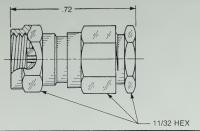
Cable Pullout Resistance: 18 lbs. min., clamp types. 18 lbs. min., crimp types.

Coupling Nut Pullout Resistance: Female screw-on types, 35 lbs. min. to 100 lbs.

SCREW-ON MATING

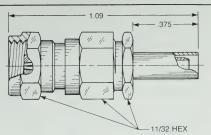
Straight Female Cable Plug

Clamp type for flexible cable: 1702-1551-0XX (Gold plated) 1702-7551-0XX (Nickel plated)



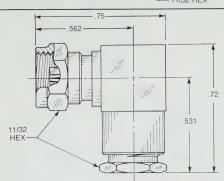
Straight Female Cable Plug

Crimp type for flexible cable: 1702-1571-0XX (Gold plated) 1702-7571-0XX (Nickel plated)



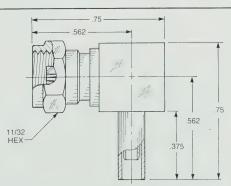
Right Angle Female Cable Plug

Clamp type for flexible cable: 1705-1551-0XX (Gold plated) 1705-7551-0XX (Nickel plated)



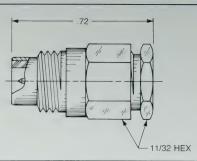
Right Angle Female Cable Plug

Crimp type for flexible cable: 1715-1521-0XX (Gold plated) 1715-7521-0XX (Nickel plated)



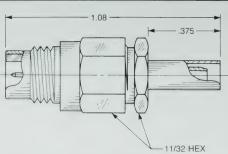
Substitute the appropriate cable group for 'XX':			able group for 'XX':
03	RG179, M17/94	07	RG59, RG62, M17/29, M17/30
04	RG180, RG195, M17/95		

SCREW-ON MATING



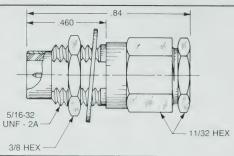
Straight Male Cable Jack

Clamp type for flexible cable: 1701-1551-0XX (Gold plated) 1701-7551-0XX (Nickel plated)



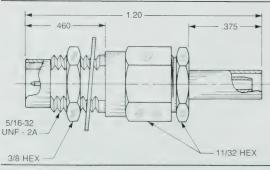
Straight Male Cable Jack

Crimp type for flexible cable: 1701-1571-0XX (Gold plated) 1701-7571-0XX (Nickel plated)



Straight Male Bulkhead Cable Jack

Clamp type for flexible cable: 1703-1551-0XX (Gold plated) 1703-7551-0XX (Nickel plated)



03 RG179, M17/94 04 RG180, RG195,

Straight Male Bulkhead Cable Jack

Crimp type for flexible cable: 1703-1571-0XX (Gold plated) 1703-7571-0XX (Nickel plated)

Substitute the app	propriate o	able group for 'XX':	
	07	RG59, RG62, M17/29, M17/30	
M17/95			

RECEPTACLES 9 0 1 1 1

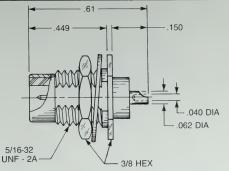
SCREW-ON MATING

Straight Male Bulkhead Jack Receptacle

- Solder pot contact
- Rear mount

1704-1511-000 (Gold plated)

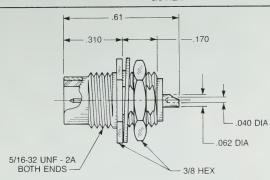
1704-7511-000 (Nickel plated)



Straight Male Bulkhead Jack Receptacle

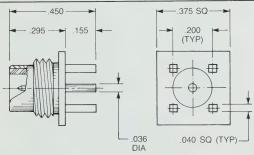
- Solder pot contact
- Front mount

1719-1511-000 (Gold plated) 1719-7511-000 (Nickel plated)



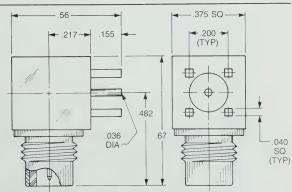
Straight Male P.C. Board Receptacle

1709-1511-000 (Gold plated) 1709-7511-000 (Nickel plated)

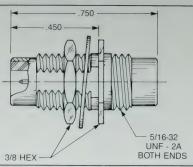


Right Angle Male P.C. Board Receptacle

1710-1511-000 (Gold plated) 1710-7511-000 (Nickel plated)



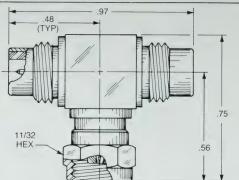
SCREW-ON MATING



Bulkhead Mounted Straight Male Jack To Jack Adapter

· Connects two plugs

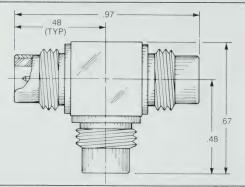
5722-1501-000 (Gold plated) **5722-7501-000** (Nickel plated)



Tee Adapter (Unmatched Power Divider) Jack To Plug To Jack

· Connects two plugs and one jack

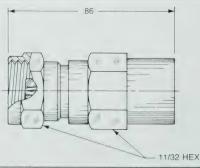
5715-1501-000 (Gold plated) 5715-7501-000 (Nickel plated)



Tee Adapter (Unmatched Power Divider) Jack To Jack To Jack

· Connects three plugs

5707-1501-000 (Gold plated) **5707-7501-000** (Nickel plated)



Female Plug Resistive Termination

(Dummy load)

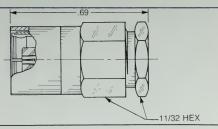
Standard resistor: 75 OHM, 1/2 watt, 5% tolerance

1736-1511-075 (Gold plated) 1736-7511-075 (Nickel plated)

SNAP-ON MATING

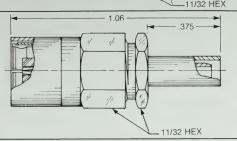
Straight Female Cable Plug

Clamp type for flexible cable: 2702-1551-0XX (Gold plated) 2702-7551-0XX (Nickel plated)



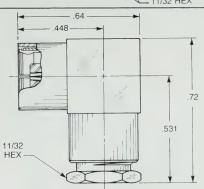
Straight Female Cable Plug

Crimp type for flexible cable: 2702-1571-0XX (Gold plated) 2702-7571-0XX (Nickel plated)



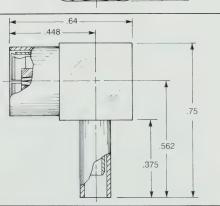
Right Angle Female Cable Plug

Clamp type for flexible cable: 2705-1551-0XX (Gold plated) 2705-7551-0XX (Nickel plated)



Right Angle Female Cable Plug

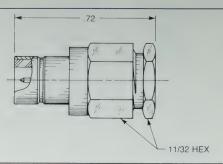
Crimp type for flexible cable: 2715-1521-0XX (Gold plated) 2715-7521-0XX (Nickel plated)



	Substitute the appropria	Substitute the appropriate cable group for 'XX':		
03	RG179, M17/94	07	RG59, RG62, M17/29, M17/30	
04	RG180, RG195, M17/95			

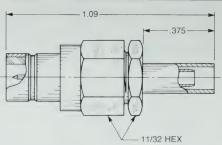
75 Ohn Jacks

SNAP-ON MATING



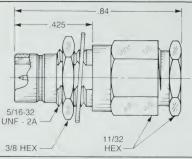
Straight Male Cable Jack

Clamp type for flexible cable: 2701-1551-0XX (Gold plated) 2701-7551-0XX (Nickel plated)



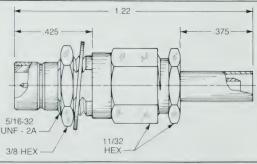
Straight Male Cable Jack

Crimp type for flexible cable: 2701-1571-0XX (Gold plated) 2701-7571-0XX (Nickel plated)



Straight Male Bulkhead Cable Jack

Clamp type for flexible cable: 2703-1551-0XX (Gold plated) 2703-7551-0XX (Nickel plated)



Straight Male Bulkhead Cable Jack

Crimp type for flexible cable: 2703-1571-0XX (Gold plated) 2703-7571-0XX (Nickel plated)

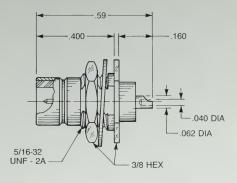
0:	3 RG179, M17/94	07	RG59, RG62, M17/29, M17/30	
0	4 RG180, RG195, M17/95			

SNAP-ON MATING

Straight Male Bulkhead Jack Receptacle

- Solder pot contact
- Rear mount

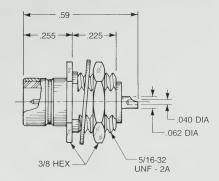
2704-1511-000 (Gold plated) **2704-7511-000** (Nickel plated)



Straight Bulkhead Jack Receptacle

- · Solder pot contact
- Front mount

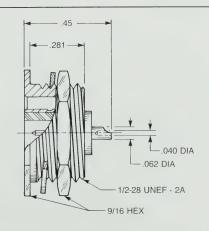
2719-1511-000 (Gold plated) 2719-7511-000 (Nickel plated)



Straight Male Bulkhead Jack Receptacle

- Solder pot contact
- · Recessed front mount

2776-1511-000 (Gold plated) **2776-7511-000** (Nickel plated)

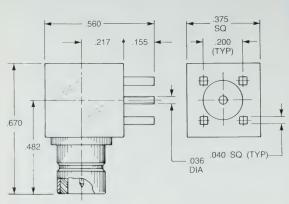


SNAP-ON MATING

.375 450 HEX .200 295 .155 (TYP) 0 0 0 .040 036 SQ DIA (TYP)

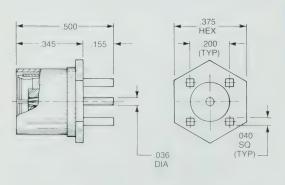
Straight Male Jack P.C. Board Receptacle

2709-1511-001 (Gold plated) 2709-7511-001 (Nickel plated)



Right Angle Male Jack P.C. Board Receptacle

2710-1511-000 (Gold plated) 2710-7511-000 (Nickel plated)



Straight Female Plug P.C. Board Receptacle

2725-1511-000 (Gold plated) 2725-7511-000 (Nickel plated)

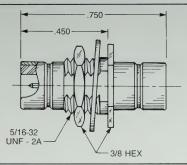
ADAPTERS 75 OF THE PROPERTY OF

SNAP-ON MATING

Bulkhead Mounted Straight Male Jack To Jack Adapter

· Connects two plugs

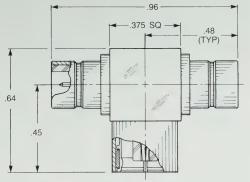
5732-1501-000 (Gold plated) **5732-7501-000** (Nickel plated)



Tee Adapter (Unmatched Power Divider) Jack To Plug To Jack

· Connects two plugs and one jack

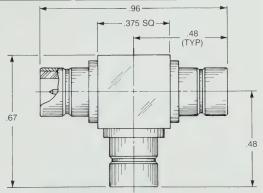
5725-1501-000 (Gold plated) **5725-7501-000** (Nickel plated)



Tee Adapter (Unmatched Power Divider) Jack To Jack To Jack

· Connects three plugs

5727-1501-000 (Gold plated) **5727-7501-000** (Nickel plated)



Female Plug Resistive Termination

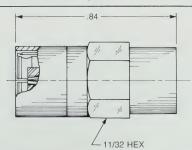
(Dummy load)

Standard resistor:

75 ohm, 1/2 watt,

5% tolerance

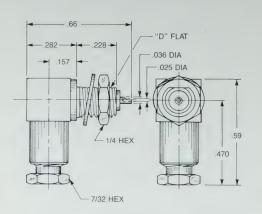
2736-1511-075 (Gold plated) 2736-7511-075 (Nickel plated)



CABLE & PORTON OF THE STATE OF

Some applications require that a signal or cable core be fed through a bulkhead or into a P.C. board, but do not need the option of disconnecting the cable.

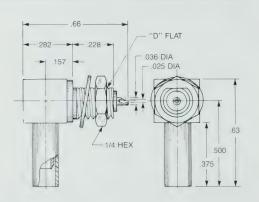
In these cases, a cable termination provides a method of securely anchoring the cable mechanically and electrically. In addition, considerable expense can be saved compared with the use of a pair of connectors.



Bulkhead Mounted Right Angle Cable Termination

Clamp type for flexible cable: 8044-1551-0XX (Gold plated) 8044-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 8044-1541-0XX (Gold plated) 8044-7541-0XX (Nickel plated)



Bulkhead Mounted Right Angle Cable Termination

Crimp type for flexible cable: 8144-1521-0XX (Gold plated) 8144-7521-0XX (Nickel plated)

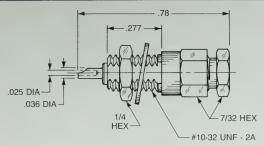
Substitute the appropriate cable group for 'XX':		
02 RG178, RG196, M17/93, M17/169	09 .141" semi-rigid, RG402, M17/130	
03 RG174, RG179, RG316, M17/113,	10 .085" semi-rigid, RG405, M17/133	
M17/119, M17/172, M17/173	19 RG174DS, RG316DS,	
05 RG178DS, RG196DS	M17/152, Times RD316	

CABLE PORTURO PORTURO

Bulkhead Mounted Straight Cable Termination

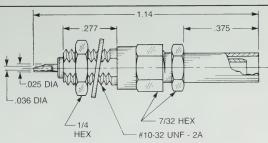
Clamp type for flexible cable: 8020-1551-0XX (Gold plated) 8020-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 8020-1541-0XX (Gold plated) 8020-7541-0XX (Nickel plated)



Bulkhead Mounted Straight Cable Termination

Crimp type for flexible cable: 8020-1571-0XX (Gold plated) 8020-7571-0XX (Nickel plated)



Bulkhead Mounted Straight Cable Feedthrough

 Feeds cable dielectric and center conductor through bulkhead

Clamp type for flexible cable:

8021-1051-0XX (Gold plated)

8021-7051-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: **8021-1041-0XX** (Gold plated)

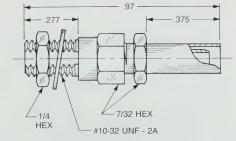
8021-7041-0XX (Nickel plated)

.61 .277 .1/4 HEX 7/32 HEX #10-32 UNF - 2A

Bulkhead Mounted Straight Cable Feedthrough

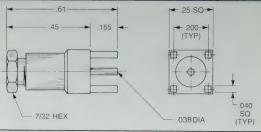
 Feeds cable dielectric and center conductor through bulkhead

Crimp type for flexible cable: 8021-1071-0XX (Gold plated) 8021-7071-0XX (Nickel plated)



	Substitute the appropriate cable group for 'XX':			
02	RG178, RG196, M17/93, M17/169	09	.141" semi-rigid, RG402, M17/130	
03	RG174, RG179, RG316, M17/113,	10	.085" semi-rigid, RG405, M17/133	
	M17/119, M17/172, M17/173	19	RG174DS, RG316DS,	
05	RG178DS, RG196DS		M17/152, Times RD316	

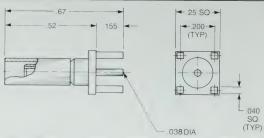
CABLE PORTUNOSTIONS



Straight P.C. Board Cable Termination

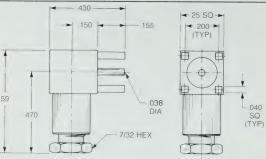
Clamp type for flexible cable: 8046-1551-0XX (Gold plated) 8046-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 8046-1541-0XX (Gold plated) 8046-7541-0XX (Nickel plated)



Straight P.C. Board Cable Termination

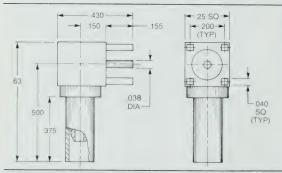
Crimp type for flexible cable: 8146-1521-0XX (Gold plated) 8146-7521-0XX (Nickel plated)



Right Angle P.C. Board Cable Termination

Clamp type for flexible cable: 8045-1551-0XX (Gold plated) 8045-7551-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 8045-1541-0XX (Gold plated) 8045-7541-0XX (Nickel plated)



Right Angle P.C. Board Cable Termination

Crimp type for flexible cable: 8145-1521-0XX (Gold plated) 8145-7521-0XX (Nickel plated)

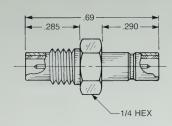
Substitute the appropriate cable group for 'XX':				
02	RG178, RG196, M17/93, M17/169	09	.141" semi-rigid, RG402, M17/130	
03	RG174. RG179. RG316. M17/113.	10	.085" semi-rigid, RG405, M17/133	
	M17/119, M17/172, M17/173	19	RG174DS, RG316DS,	
05	RG178DS, RG196DS		M17/152, Times RD316	

BETWEEN SERIES SMB TO SMC

SMB Male Jack To SMC Male Jack

• Connects SMB plug to SMC plug

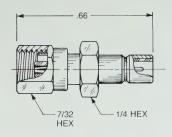
(Gold plated) (Nickel plated)



SMB Male Jack To SMC Female Plug

· Connects SMB plug to SMC jack

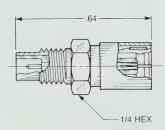
5830-1501-000 (Gold plated) **5830-7501-000** (Nickel plated)



SMB Female Plug To SMC Male Jack

Connects SMB jack to SMC plug

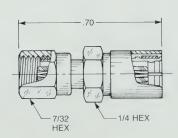
5832-1501-000 (Gold plated) **5832-7501-000** (Nickel plated)



SMB Female Plug To SMC Female Plug

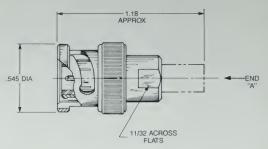
· Connects SMB jack to SMC jack

5831-1501-000 (Gold plated) **5831-7501-000** (Nickel plated)



BNC TO SUBMINIATURE

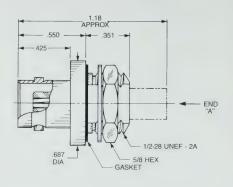
BNC PLUG



	SMC MALE JACK	5402-1501-000 5402-7501-000
NO	SMC FEMALE PLUG	5403-1501-000 5403-7501-000
GURATION	SMB MALE JACK	5404-1501-000 5404-7501-000
FIGU	SMB FEMALE PLUG	5405-1501-000 5405-7501-000
CONFI	75 OHM SCREW-ON MALE JACK	5406-1501-000 5406-7501-000
,. A ,,	75 OHM SCREW-ON FEMALE PLUG	5407-1501-000 5407-7501-000
END	75 OHM SNAP-ON MALE JACK	5408-1501-000 5408-7501-000
	75 OHM SNAP-ON FEMALE PLUG	5409-1501-000 5409-7501-000

BNC BULKHEAD JACK

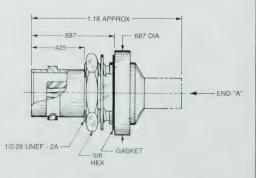
FRONT MOUNT



	I LIVIALL I LOG	3409-7301-000
	SMC MALE JACK	5510-1501-000 5510-7501-000
NO	SMC FEMALE PLUG	5511-1501-000 5511-7501-000
CONFIGURATION	SMB MALE JACK	5512-1501-000 5512-7501-000
FIGU	SMB FEMALE PLUG	5513-1501-000 5513-7501-000
CON	75 OHM SCREW-ON MALE JACK	5514-1501-000 5514-7501-000
,, V	75 OHM SCREW-ON FEMALE PLUG	5515-1501-000 5515-7501-000
END	75 OHM SNAP-ON MALE JACK	5516-1501-000 5516-7501-000
	75 OHM SNAP-ON FEMALE PLUG	5517-1501-000 5517-7501-000

BNC BULKHEAD JACK

REAR MOUNT

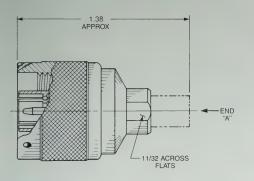


	PEIVIALE PLUG	5517-7501-000
CONFIGURATION	SMC MALE JACK	5502-1501-000 5502-7501-000
	SMC FEMALE PLUG	5503-1501-000 5503-7501-000
	SMB MALE JACK	5504-1501-000 5504-7501-000
FIGL	SMB FEMALE PLUG	5505-1501-000 5505-7501-000
CON	75 OHM SCREW-ON MALE JACK	5506-1501-000 5506-7501-000
۲,۸	75 OHM SCREW-ON FEMALE PLUG	5507-1501-000 5507-7501-000
END	75 OHM SNAP-ON MALE JACK	5508-1501-000 5508-7501-000
	75 OHM SNAP-ON FEMALE PLUG	5509-1501-000 5509-7501-000

BETWEEN SERIES N TO SUBMINIATURE

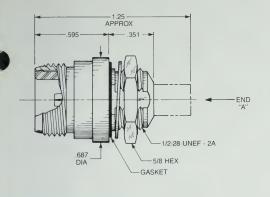
N TO SUBMINIATOR

N Plug



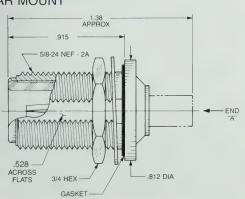
	SMC MALE JACK	5002-1501-000 5002-7501-000
NO	SMC FEMALE PLUG	5003-1501-000 5003-7501-000
CONFIGURATION	SMB MALE JACK	5004-1501-000 5004-7501-000
FIGU	SMB FEMALE PLUG	5005-1501-000 5005-7501-000
CON	75 OHM SCREW-ON MALE JACK	5006-1501-000 5006-7501-000
۲,۲	75 OHM SCREW-ON FEMALE PLUG	5007-1501-000 5007-7501-000
END	75 OHM SNAP-ON MALE JACK	5008-1501-000 5008-7501-000
	75 OHM SNAP-ON FEMALE PLUG	5009-1501-000 5009-7501-000

N Bulkhead Jack FRONT MOUNT



	SMC MALE JACK	5610-1501-000 5610-7501-000
NO	SMC FEMALE PLUG	5611-1501-000 5611-7501-000
CONFIGURATION	SMB MALE JACK	5612-1501-000 5612-7501-000
FIGU	SMB FEMALE PLUG	5613-1501-000 5613-7501-000
CON	75 OHM SCREW-ON MALE JACK	5614-1501-000 5614-7501-000
,, Y ,,	75 OHM SCREW-ON FEMALE PLUG	5615-1501-000 5615-7501-000
END	75 OHM SNAP-ON MALE JACK	5616-1501-000 5616-7501-000
	75 OHM SNAP-ON FEMALE PLUG	5617-1501-000 5617-7501-000

N Bulkhead Jack REAR MOUNT



	SMC MALE JACK	5602-1501-000 5602-7501-000
NO O	SMC FEMALE PLUG	5603-1501-000 5603-7501-000
CONFIGURATION	SMB MALE JACK	5604-1501-000 5604-7501-000
FIGU	SMB FEMALE PLUG	5605-1501-000 5605-7501-000
CON	75 OHM SCREW-ON MALE JACK	5606-1501-000 5606-7501-000
,, Y ,,	75 OHM SCREW-ON FEMALE PLUG	5607-1501-000 5607-7501-000
END	75 OHM SNAP-ON MALE JACK	5608-1501-000 5608-7501-000
	75 OHM SNAP-ON FEMALE PLUG	5609-1501-000 5609-7501-000

AEP New Haven, CT **203/776-2813**

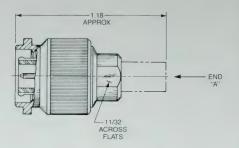
⁻¹⁵⁰¹⁻ indicates gold plated body -7501- indicates nickel plated body



BETWEEN SERIES

TNC TO SUBMINIATURE

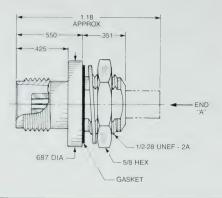
TNC Plug



NO	SMC MALE JACK	5302-1501-000 5302-7501-000
	SMC FEMALE PLUG	5303-1501-000 5303-7501-000
CONFIGURATION	SMB MALE JACK	5304-1501-000 5304-7501-000
FIGU	SMB FEMALE PLUG	5305-1501-000 5305-7501-000
CON	75 OHM SCREW-ON MALE JACK	5306-1501-000 5306-7501-000
,, V ,,	75OHM SCREW-ON FEMALE PLUG	5307-1501-000 5307-7501-000
END	75 OHM SNAP-ON MALE JACK	5308-1501-000 5308-7501-000
	75 OHM SNAP-ON FEMALE PLUG	5309-1501-000 5309-7501-000

TNC Bulkhead Jack

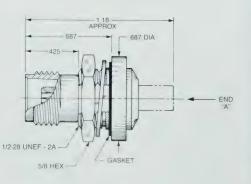
FRONT MOUNT



L	, 21111 IZZ 1 ZOG	3003 1301 000
	SMC MALE JACK	5110-1501-000 5110-7501-000
NOI	SMC FEMALE PLUG	5111-1501-000 5111-7501-000
JRAT	SMB MALE JACK	5112-1501-000 5112-7501-000
CONFIGURATION	SMB FEMALE PLUG	5113-1501-000 5113-7501-000
_	75 OHM SCREW-ON MALE JACK	5114-1501-000 5114-7501-000
,. A ,,	75 OHM SCREW-ON FEMALE PLUG	5115-1501-000 5115-7501-000
END	75 OHM SNAP-ON MALE JACK	5116-1501-000 5116-7501-000
	75 OHM SNAP-ON FEMALE PLUG	5117-1501-000 5117-7501-000

TNC Bulkhead Jack

REAR MOUNT



	FEIVIALE PLUG	5117-7501-000
NOI	SMC MALE JACK	5102-1501-000 5102-7501-000
	SMC FEMALE PLUG	5103-1501-000 5103-7501-000
JRAT	SMB MALE JACK	5104-1501-000 5104-7501-000
CONFIGURATION	SMB FEMALE PLUG	5105-1501-000 5105-7501-000
CON	75 OHM SCREW-ON MALE JACK	5106-1501-000 5106-7501-000
,, Y ,,	75 OHM SCREW-ON FEMALE PLUG	5107-1501-000 5107-7501-000
END	75 OHM SNAP-ON MALE JACK	5108-1501-000 5108-7501-000
	75 OHM SNAP-ON FEMALE PLUG	5109-1501-000 5109-7501-000

⁻¹⁵⁰¹⁻ indicates gold plated body -7501- indicates nickel plated body



Straight Plug For Flexible Or Semi-Rigid Cable

Clamp type for flexible cable: 6500-1051-0XX (Gold plated)

6500-7051-0XX (Nickel plated)

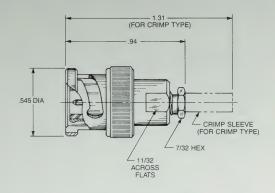
Crimp type for flexible cable:

6500-1071-0XX (Gold plated) **6500-7071-0XX** (Nickel plated)

Solder-clamp for semi-rigid cable:

6500-1041-0XX (Gold plated)

6500-7041-0XX (Nickel plated)



Bulkhead Jack Front Mount

Clamp type for flexible cable:

6502-1051-0XX (Gold plated)

6502-7051-0XX (Nickel plated)

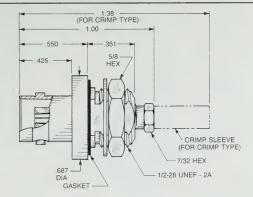
Crimp type for flexible cable:

6502-1071-0XX (Gold plated) **6502-7071-0XX** (Nickel plated)

Solder-clamp for semi-rigid cable:

6502-1041-0XX (Gold plated)

6502-7041-0XX (Nickel plated)



Bulkhead Jack Rear Mount

Clamp type for flexible cable:

6501-1051-0XX (Gold plated)

6501-7051-0XX (Nickel plated)

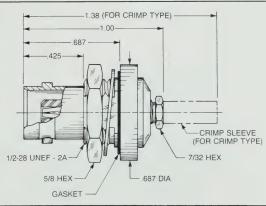
Crimp type for flexible cable:

6501-1071-0XX (Gold plated) **6501-7071-0XX** (Nickel plated)

Solder-clamp for semi-rigid cable

Solder-clamp for semi-rigid cable:

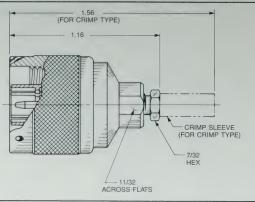
6501-1041-0XX (Gold plated) **6501-7041-0XX** (Nickel plated)



	Substitute the appropriate cable group for 'XX':			
02	02 RG178, RG196, M17/93, M17/169 09 .141" semi-rigid, RG402, M17/130			
03	RG174, RG179, RG316, M17/113,	10	.085" semi-rigid, RG405, M17/133	
	M17/119, M17/172, M17/173	19	RG174DS, RG316DS,	
05	RG178DS, RG196DS		M17/152, Times RD316	

CABLE CONNECTORS



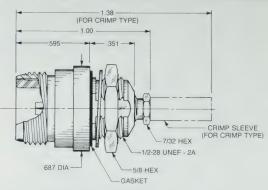


Straight Plug For Flexible Or Semi-Rigid Cable

Clamp type for flexible cable: 4000-1051-0XX (Gold plated) 4000-7051-0XX (Nickel plated)

Crimp type for flexible cable: 4000-1071-0XX (Gold plated) 4000-7071-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 4000-1041-0XX (Gold plated) 4000-7041-0XX (Nickel plated)

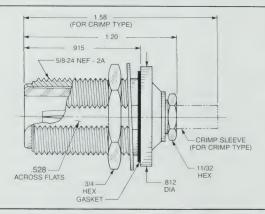


Bulkhead Jack Front Mount

Clamp type for flexible cable: 4502-1051-0XX (Gold plated) 4502-7051-0XX (Nickel plated)

Crimp type for flexible cable: 4502-1071-0XX (Gold plated) 4502-7071-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 4502-1041-0XX (Gold plated) 4502-7041-0XX (Nickel plated)



Bulkhead Jack Rear Mount

Clamp type for flexible cable: 4501-1051-0XX (Gold plated) 4501-7051-0XX (Nickel plated)

Crimp type for flexible cable: 4501-1071-0XX (Gold plated) 4501-7071-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 4501-1041-0XX (Gold plated) 4501-7041-0XX (Nickel plated)

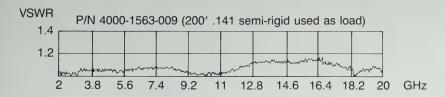
Substitute the appropriate cable group for 'XX':		
02 RG178, RG196, M17/93, M17/169	09 .141" semi-rigid, RG402, M17/130	
03 RG174, RG179, RG316, M17/113,	10 .085" semi-rigid, RG405, M17/133	
M17/119, M17/172, M17/173	19 RG174DS, RG316DS,	
05 RG178DS, RG196DS	M17/152, Times RD316	

PLUGS AND JACKS

The precision type N connectors shown here are constructed of 303 stainless steel, with Teflon insulators and beryllium copper contacts.

These plugs and jacks all have captivated contacts which plug on to the cable center conductor, eliminating contact soldering and gapping. Simply trim the cable, slide the connector on, and solder the jacket.

The VSWR data shown is taken from production units.

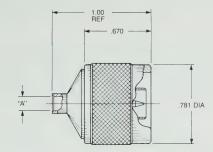


Straight Plug

- · Direct solder type
- · Gold plated body, passivated coupling nut.

For .085'' semi-rigid (A = .089): 4000-1563-010

For .141" semi-rigid (A = .144): 4000-1563-009



Bulkhead Jack

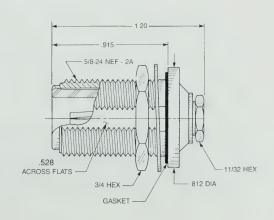
- Solder-clamp type to allow repositioning of D-flats after assembly.
- Passivated body, gold plated solder ferrule.
- Rear mount

For .085" semi-rigid:

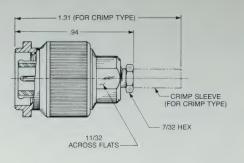
4501-9543-010

For .141" semi-rigid:

4501-9543-009





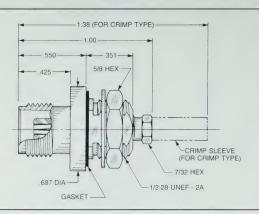


Straight Plug For Flexible Or Semi-Rigid Cable

Clamp type for flexible cable: 6000-1051-0XX (Gold plated) 6000-7051-0XX (Nickel plated)

Crimp type for flexible cable: 6000-1071-0XX (Gold plated) 6000-7071-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 6000-1041-0XX (Gold plated) 6000-7041-0XX (Nickel plated)

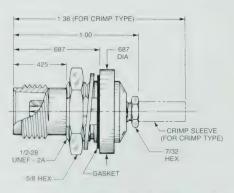


Bulkhead Jack Front Mount

Clamp type for flexible cable: 6002-1051-0XX (Gold plated) 6002-7051-0XX (Nickel plated)

Crimp type for flexible cable: 6002-1071-0XX (Gold plated) 6002-7071-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 6002-1041-0XX (Gold plated) 6002-7041-0XX (Nickel plated)



Bulkhead Jack Rear Mount

Clamp type for flexible cable: 6001-1051-0XX (Gold plated) 6001-7051-0XX (Nickel plated)

Crimp type for flexible cable: 6001-1071-0XX (Gold plated) 6001-7071-0XX (Nickel plated)

Solder-clamp for semi-rigid cable: 6001-1041-0XX (Gold plated) 6001-7041-0XX (Nickel plated)

Substitute the appropriate cable group for 'XX':		
02 RG178, RG196, M17/93, M17/169	09 .141" semi-rigid, RG402, M17/130	
03 RG174, RG179, RG316, M17/113,	10 .085" semi-rigid, RG405, M17/133	
M17/119, M17/172, M17/173	19 RG174DS, RG316DS,	
05 RG178DS, RG196DS	M17/152, Times RD316	

assembles

Even the best coaxial connector can't work right unless it is correctly assembled to the cable. Since we make the connectors, we have the knowledge and the ability to do the job right.

If you make your own cable assemblies, here's what you have to do:

- Determine what you'll need to do the job, accounting for scrap rates.
- · Buy and stock connectors, cable, markers, and shrink tubing.
- Develop a training system for your assemblers.
- Develop and maintain the assembly tooling and test equipment.
- · Scrap parts damaged during assembly as well as complete assemblies that don't meet specifications.
- Juggle your production schedule to make sure the right assemblies are ready for installation at the right time.

If you buy complete assemblies from us, here's what you have to do:

• Install the assemblies in your equipment.

The following pages show a number of suggestions for minimizing your cost of cable assemblies. Send us your drawings and we'll show you how to get the assemblies you need, when you need them, without headaches.



DESIGN CONSIDERATIONS FOR FLEXIBLE ASSEMBLIES

There are a number of things that, when kept in mind while specifying flexible cable assemblies, can cut costs and ensure the best possible performance:

- 1) Crimp type connectors are faster and less expensive to assemble than clamp types, and provide better strain relief at the cable junction. Crimp connectors grip five to ten times more length of braid than clamp connectors do, an important consideration given the small cross-sectional area of most coaxial cable braid wires.
- 2) Nickel plated or passivated connectors provide the same electrical performance as gold plated connectors, but at a lower price.
- 3) Cable terminations (see pages 124-126) can often eliminate the need for (and expense of) a cable connector / receptacle combination in applications where one end of the cable will not need to be disconnected during service.
- 4) Cables with wrapped-tape dielectrics and/or jackets are generally more expensive to buy and always more expensive to assemble than cables with extruded dielectrics and jackets.
- 5) Soldering the braid of flexible cables to connectors should ALWAYS be avoided. The heat used in soldering will damage even cables with Teflon dielectrics, and will destroy cables with polyethylene dielectrics. All AEP connectors grip the cable with a strength greater than the breaking strength of the cable braid, so soldering is also redundant.
- 6) Excessively tight tolerances will increase cost. Additionally, if enough slack is not designed into the specification, you may run the risk of having cables that will be under constant mechanical stress when installed, thereby degrading the electrical performance over time.
- 7) All screw-on connectors have some play in the coupling nuts, so lengths should be dimensioned to the reference plane. In general, length should be dimensioned to the following points:

Straight plugs and jacks: To reference plane.

Bulkhead jacks: To bulkhead mounting surface.

Right angle connectors: To centerline of mating side.

The standard flexible cable assemblies shown on the following pages all have nickel plated crimp type connectors, and have heat-shrink tubing installed at the cable junction.

DESIGN CONSIDERATIONS FOR SEMI-RIGID ASSEMBLIES

Since semi-rigid assemblies are generally used at higher frequencies than flexible assemblies, the design and construction elements are more critical. We make our own bending and trimming equipment, and use induction heating only (not resistance pliers) for soldering cable jackets. We can make semi-rigid assemblies using any connectors on cable sizes from .047" to .250", made and tested to meet your specifications, 100% guaranteed.

Keeping the following in mind can cut cost and ensure the best possible performance in semi-rigid assemblies:

GUIDELINES OS PARTICIONES

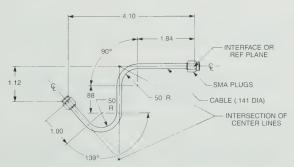
- 1) When using .141" semi-rigid cable and SMA connectors, the best performance is gained from using plugs that use the cable center conductor as the contact, such as our 9301-1063-009. One problem presented by this connector used to be that the sharp edge of the pointed center conductor would shed metal chips onto the interface each time the connector was mated. Since we use only the best equipment available to manufacture its cable assemblies, we are able to produce a point which virtually eliminates this problem. Our equipment also enables us to machine an extremely smooth, burr free finish on the interface which is critical for high frequency applications.
- 2) Dimensions should be as tight as possible and tolerances as loose as possible. Tolerances less than $\pm .030$ " add extra expense.
- 3) Extremely tight bends are expensive and will cause the cable center conductor to migrate toward the outside of the bend over time. Bend radii should be as large as possible, and never smaller than 1.5 times the cable diameter (measured to the inside of the cable). A minimum of two cable diameters of straight length should be allowed from the connector attachment before starting bends.
- 4) Lengths should be dimensioned to the following points, since they are a fixed characteristic of the connectors and installation locations:

Straight plugs and jacks: To reference plane.

Bulkhead jacks: To bulkhead mounting surface.

Right angle connectors: To centerline of mating end.

- 5) We can bend cables tightly enough without damage that a straight SMA plug with a 90° bend will fit in the same space as a right angle plug. Right angle plugs are more expensive and have relatively poor electrical performance at high frequency.
- 6) The drawing below illustrates a dimensioning method that is easiest to translate into finished assemblies.
- a) Straight lengths should be dimensioned to the start of bends.
- b) Bends should be specified by radius to inside of cable and degrees of bend. Radii to center of cable are unmeasurable.
- c) Dimensions that cannot be definitively measured, such as intersections of centerlines of bent cables as shown below, should be avoided.



The standard semi-rigid assemblies shown on the following pages all use nickel-plated connectors and hand-formable (soft jacketed) semi-rigid cable.



SMA SERIES CONNECTORS

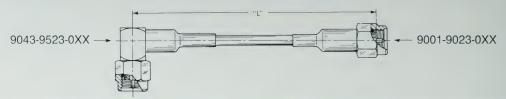
Straight Plug To Straight Plug

RG-316/U CABLE: **80-1161-XXXX** RG-223/U CABLE: **80-1162-XXXX**



Right Angle Plug To Straight Plug

RG-316/U CABLE: **80-1163-XXXX** RG-223/U CABLE: **80-1164-XXXX**



Right Angle Plug To Right Angle Plug

RG-316/U CABLE: **80-1165-XXXX** RG-223/U CABLE: **80-1166-XXXX**



Straight Plug To Bulkhead Jack

RG-316/U CABLE: **80-1167-XXXX** RG-223/U CABLE: **80-1168-XXXX**



Right Angle Plug To Bulkhead Jack

RG-316/U CABLE: 80-1169-XXXX RG-223/U CABLE: 80-1170-XXXX



FLEXIBLE OS OF THE LOCATION OF

SMB SERIES CONNECTORS

Straight Plug To Straight Plug

RG-316/U CABLE: 80-1151-XXXX



Right Angle Plug To Straight Plug

RG-316/U CABLE: 80-1152-XXXX



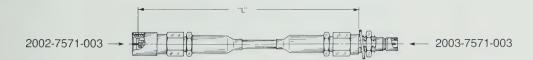
Right Angle Plug To Right Angle Plug

RG-316/U CABLE: 80-1153-XXXX



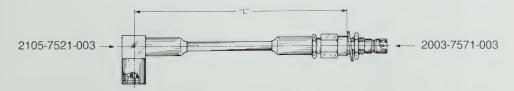
Straight Plug To Bulkhead Jack

RG-316/U CABLE: 80-1154-XXXX



Right Angle Plug To Bulkhead Jack

RG-316/U CABLE: 80-1155-XXXX

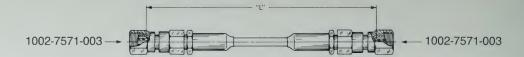


FLEXIBLE

SMC SERIES CONNECTORS

Straight Plug To Straight Plug

RG-316/U CABLE: 80-1156-XXXX



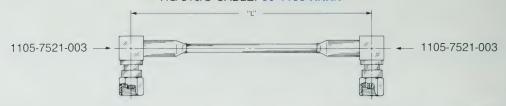
Right Angle Plug To Straight Plug

RG-316/U CABLE: 80-1157-XXXX



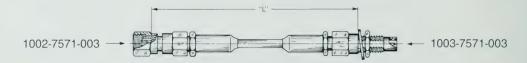
Right Angle Plug To Right Angle Plug

RG-316/U CABLE: 80-1158-XXXX



Straight Plug To Bulkhead Jack

RG-316/U CABLE: 80-1159-XXXX



Right Angle Plug To Bulkhead Jack RG-316/U CABLE: 80-1160-XXXX



SEMI-RIGID OS POR TOUR SEMI-RIGID OS POR TOUR

SMA CONNECTORS

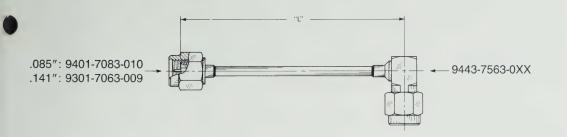
Straight Plug To Straight Plug

.085" SEMI-RIGID: 81-1224-XXXX .141" SEMI-RIGID: 81-1212-XXXX



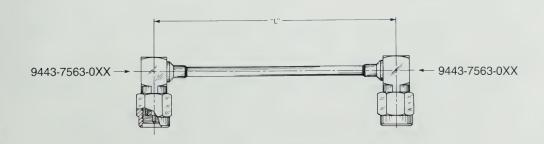
Straight Plug To Right Angle Plug

.085" SEMI-RIGID: 81-1225-XXXX .141" SEMI-RIGID: 81-1226-XXXX



Right Angle Plug To Right Angle Plug

.085" SEMI-RIGID: 81-1227-XXXX .141" SEMI-RIGID: 81-1228-XXXX



SMA CONNECTORS

Straight Plug To Bulkhead Jack

.085" SEMI-RIGID: 81-1229-XXXX .141" SEMI-RIGID: 81-1230-XXXX



Right Angle Plug To Bulkhead Jack

.085" SEMI-RIGID: 81-1231-XXXX .141" SEMI-RIGID: 81-1232-XXXX



Panel Jack To Panel Jack

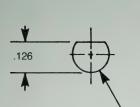
2-HOLE FLANGE .085" SEMI-RIGID: **81-1233-XXXX** .141" SEMI-RIGID: **81-1234-XXXX**



MOUNTING DIMENSIONS

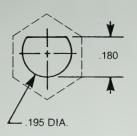
All Dimensions ± .003 Unless Otherwise Specified

SSMB/SSMC SERIES
BULKHEAD CONNECTORS

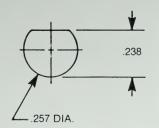


.140 DIA. -

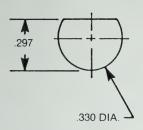
SMB, SMC, SLB BULKHEAD CONNECTORS



SMA BULKHEAD CONNECTORS



75 OHM BULKHEAD CONNECTORS



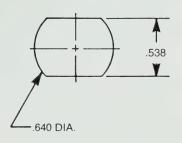
BNC, TNC, N BULKHEAD CONNECTORS AND BETWEEN SERIES ADAPTERS (Except type N rear mount)

DOTTED LINE INDICATES FLAT LOCATION IN RELATION TO

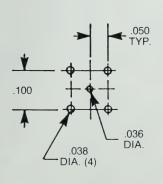
HEX.



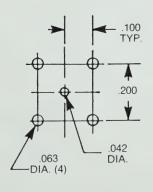
TYPE N REAR MOUNT CONNECTORS AND ADAPTERS



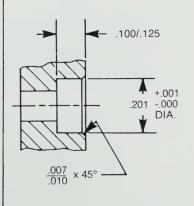
SSMB/SSMC SERIES PRINTED-CIRCUIT BOARD CONNECTORS



ALL PRINTED-CIRCUIT BOARD CONNECTORS EXCEPT SSMB/SSMC



SMA KNURL MOUNT CONNECTORS



CABLE DATA

FLEXIBLE CABLE

X -	MAX	ATTS) @	ft) @ M	Db/100 UENCY	TION (I	MAX	ATTI		UCTOF	_			AEP C		
				ANCE	CKET		AID	-	CTRIC		1	CEN		<u>M17/</u>	RG-
3	223	RG-	USE	50	.206	G	.176	DE	.116	G	.032	Α	01	26, 167	55
5	55	28	1.0	50	.195	J	.150	Е	.116	G	.036	SE	06	28, 155, 197	58
2	72	16	1.0	75	.242	J	.191	F	.146	G	.023	С	07	29	59
5	45	13	1.0	93	.242	J	.191	F	.146	G	.025	С	07	30, 91, 97	62
5	35	30	1.0	50	.160	J	.126	Е	.096	G	.031	SE	30	54, 197, 198	122
3	303	RG-	USE	50	.190	- 1	.146	Α	.116	Н	.039	В	06	59, 170	141
)	140	76	12.4	50	.195	K	.171	DA	.116	Н	.037	В	01	60, 158	142
7	17	45	1.0	50	.110	J	.088	Е	.060	Н	.019	SC	03	119, 173	174
7	47	94	3.0	50	.071	K	.054	Α	.033	Н	.012	SB	02	93, 169	178
)	150	43	3.0	75	.100	K	.084	Α	.063	Н	.012	SB	03	94	179
)	150	36	3.0	95	.141	K	.124	Α	.102	Н	.012	SB	04	95	180
9	179	RG-	USE	75	.100	K	.084	Α	.063	Н	.012	SB	03	68, 94	187
3	316	RG-	USE	50	.110	K	.081	Α	.060	Н	.020	SB	03	69, 113	188
	180	RG-	USE	95	.155	K	.124	Α	.102	Н	.012	SB	04	70, 95	195
3	178	RG-	USE	50	.080	K	.054	Α	.034	Н	.012	SB	02	71, 169	196
1	11	100	12.4	50	.212	J	.176	DA	.116	G	.035	Α	01	84, 167, 200	223
)	350	26	3.0	50	.170	K	.146	Α	.116	Н	.037	В	06	111, 170	303
3	78	58	3.0	50	.098	K	0.81	Α	.060	Н	.020	SB	03	113, 172	316
	140	90	12.4	50	.195	K	.171	DA	.116	Н	.038	SA	01	128, 175	400
7	37	85	12.4	50	.114	K	.096	DA	.060	Н	.020	SB	19	152	_
7	47	94	3.0	50	.092	K	.070	DA	.034	Н	.012	SB	25	S RD-178	TIMES
	78	58	3.0	50	.118	K	.096	DA	.060	Н	.020	SB	19	S RD-316	TIMES

RG-	M17/		ABL	E GRO	UP			JTER C	PEDANG		ATTEN (Db/10 1 GH	z
402	130	09	В	.036	Н	.118	F	.141	50	12	45	64
405	133	10	В	.020	Н	.066	F	.086	50	22	80	123
_	151	11	В	.011	Н	.037	F	.047	50	40	130	180
.056"	SEMI-RIGID	21	В	.011	Н	.037	F	.056	50	35	117	161

KEY TO MATERIAL CODES:

A: Silver-covered copper

G: Polyethylene

B: Silver-covered copperweld

H: PTFE (Teflon)

C: Copperweld

1: Fiberglas

D: Double braid

E: Tinned copper

J: PVC

K: FEP (Teflon)

F: Bare copper

S: Stranded center conductor

Data is compiled from MIL-C-17 and manufacturer's literature and is not a guarantee of performance.

AEP CABLE GROUPS

Each cable group includes all modification letters for RG numbers shown, and all dash numbers for M17 slash sheets shown. For specific information on cables, please consult MIL-C-17 or the cable manufacturers.

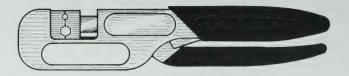
Group	Cable(s)	Standard Application	Die size for crimp
01	RG-55, 142, 223, M17/60, M17/84, M17/158, M17/167	All series except SSMB/SSMC. Crimp only for SMB, SMC, BNC, TNC, N, terminations.	.213
02	RG-178, 196, M17/93, M17/169	All series.	.105
03	RG-174, 179, 187, 188, 316, M17/94, 113, 119, 172, 173	All series.	.128
04	RG-180, 195, M17/95, Essex 21-597, Raychem 9527-A-1317, 9528-A-1317	All series except SSMB/SSMC. Crimp only for SMB, SMC, BNC, N, TNC, terminations.	.156
05	RG 178DS, 196DS, Microdot 250-3908	All series.	.128 (.105 for SSMB/SSMC)
06	RG-58, 141, 303, M17/111, M17/28, M17/155, M17/170	All series except SSMB/SSMC. Crimp only for SMB, SMC, BNC, N, TNC, terminations.	.213
07	RG-59, 62, M17/29, M17/30	75 Ohm.	.255
09	.141" semi-rigid, RG-402, M17/130	All series except SSMB/SSMC.	N/A
10	.085" semi-rigid, RG-405, M17/133	All series.	N/A
11	.045/.047" semi-rigid	SSMB/SSMC series.	N/A
13	Raychem 9530-A-1317, Microdot 295-3986	Contact factory.	
14	Microdot 250-4021	All series.	.128
15	Microdot 250-3953	Contact factory.	
19	RG-174DS, 316DS, M17/152, Times RD316	All series.	.128
21	.056" semi-rigid	SSMB/SSMC series.	N/A
25	Times RD178	All series.	.128
30	RG-122, M17/54, M17/157	SMA QPL.	

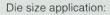
The references above indicate only standard cable/ connector combinations. Call or write if you need something you don't see.



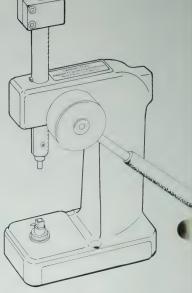
Crimp Tools For Flexible Cable

Dieset only	Die size(s)
TA-0008-1	.128, .213
TA-0008-4	.156
TA-0089	.105, .128
TA-0008-6	.255, .068
TA-0008-5	.255
	TA-0008-1 TA-0008-4 TA-0089 TA-0008-6





- .105: All connectors for –002 cable groups except right angle SMB, SMC, SLB series.
- .128: All connectors for -003, -005, -014, -019, -025 cable groups, right angle SMB, SMC, SLB series for -002 cable groups.
- .156: All connectors for -004 cable group.
- .213: All connectors for -001, -006 cable groups.
- .255: All connectors for -007 cable group.



Capping Tool for right angle connectors.

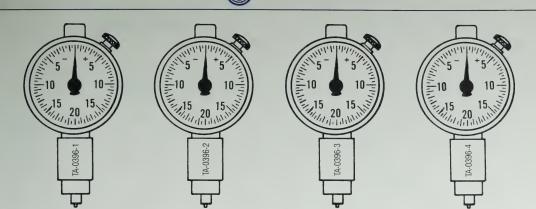
Torque Wrenches:

Using a torque wrench for mating SMA, SMC and SSMC plugs will prevent damage to equipment-mounted jacks as well as to the plugs themselves.



P/N	Application	Jaw Size	Preset Torque
TA-0397	SMA plugs	5/16"	8 inch-pounds ± 1
TA-0398	SMC plugs	7/32"	3 inch-pounds ± 1
TA-0432	SSMC plugs	5/32"	30 inch-ounces ± 1

SMA INTERFACE GAGES



SMA interface dimensions are critical to connector performance, and are largely determined by correct cable assembly procedure. We strongly recommend the use of interface gages after cable assembly to prevent damage to equipment-mounted jacks at installation.

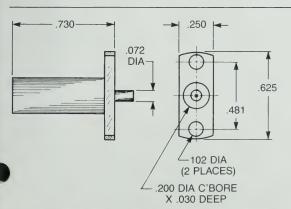
The gages shown here are 'right reading', giving a minus indication for interface components below the reference plane, and a plus indication for components above the reference plane. Standard dial indicators read the opposite way and can be confusing for operators.

These gages are accurate to .00025 inch, have graduation values of .0005 inch, and are zero-set before shipment. Replacement parts and master zero-setting gages are available.

Part numbers:

TA-0396: Set of four gages listed below, in padded wooden box with instruction booklet.

TA-0396-1: SMA plug insulator gage.TA-0396-2: SMA plug contact gage.TA-0396-3: SMA jack insulator gage.TA-0396-4: SMA jack contact gage.



Hermetic seal soldering tool

This tool can be used with any hermetic seal except 920-92. The spring-loaded plunger holds the seal in place during the soldering operation.

P/N TA-0394

CABLE ASSEMBLY INSTRUCTIONS

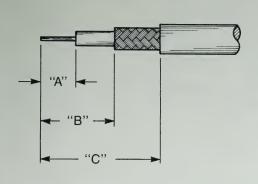
General Notes:

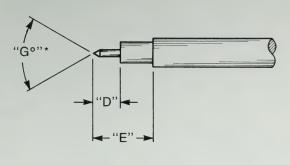
- 1) All cuts when trimming cable should be square and of precise depth. Nicking the layer underneath the layer being cut will weaken the cable mechanically and adversely affect electrical performance.
- 2) The hole in the side of the cable entry hole in contacts is there for two reasons: A) To visually inspect for proper cable insertion, and B) to allow gases formed during the soldering process to escape. It is NOT for feeding solder into the contact. Even the steadiest operator will end up with a glob of solder on the outside of the contact when using the inspection hole to feed solder. This solder on the outside of the contact makes the connector hard or impossible to assemble, and degrades electrical performance. Filing the solder glob off the contact removes plating. The proper procedure is to tin the cable center conductor, and add some liquid flux to the tinned end just before soldering to the contact. Simply insert the tinned and fluxed cable into the contact and reheat until the solder has melted.
- 3) Always avoid excessive heat when soldering. Carbon-jawed resistance pliers are much more precise and faster than soldering irons.
- 4) Always heat the sleeve, body, or contact, not the cable component being soldered.
- 5) When soldering nickel-plated connector bodies to semi-rigid cable, use Kester #2331 flux. This flux is active enough to ensure good solder bonding and is water-soluble.
- 6) When soldering to the jacket of semi-rigid cable, the cable and solder ferrule or connector body should be fixtured as tightly as possible. The soldering operation should be carried out as rapidly as possible and the joint cooled by brushing with alcohol. This, combined with a thermal cycling of the bent cable before assembly, will minimize Teflon extrusion during soldering. All major semi-rigid cable manufacturers outline cable thermal cycling procedures in their literature.
- 7) When cable sub-assemblies are threaded into bodies, always turn the body, not the nut, to prevent twisting the cable.
- 8) After trimming cable for use with crimp connectors, rotate the dielectric several times to flare the cable braid slightly. This step prevents braid wires from sliding inside the crimp tail during assembly.
- 9) When installing cable assemblies using screw-on connectors into equipment, use a torque wrench for mating. Overtorquing the plugs will damage both the cable connector and the equipment-mounted jack, and will void any warranties.
- 10) For best results when soldering SMA series connectors, use interface mates (TA-0434) with plugs and (TA-0435) with jacks.

TRIM CODES

Flexible Cable

Semi-Rigid Cable





	TRIM CODE #	DIM "A"	DIM "B"	DIM "C"	TRIM CODE #	DIM ''D''	DIM "E"	DIM "G"
	1	.080	.120	.240	101	.090	.090	
	2	.100	.430	.700	102	.090	.180	70° - 90°
	3	.080	.180	.300	103	.100	.135	
	4	.070	.200	.450	104	.080	.170	
,	5	.100	.125	.265	105	.125	.125	
	6	.100	.475	.725	106	.125	.290	
	7	.075	.200	.350	107	.090	.090	70° - 90°
	8	.075	.250	.500	108	.100	.215	
	9	.125	.300	.400	109	.060	.120	
	10	.100	.230	.500	110	.115	.330	
	11	.125	.600	.850	111	.125	.330	
	12	.100	.600	.870	112	.090	.170	
	13	.125	.325	.425	113	.125	.150	
	14	.100	.160	.390	114	.120	.150	
	15	.100	.470	.720	115	.200	.350	
	16	.100	.100	.230	116	.100	.180	
	17	.100	.210	.430	117	.125	.195	
	18	.100	.275	.400	118	.075	.100	
	19	.125	.125	.275	119	.110	.140	
	20	.125	.515	.765	120	.090	.220	
	21	.200	.220	.310	121	.125	.125	70° - 90°
	22	.200	.510	.760	122	.090	.090	70° - 90°
	23	.125	.300	.490	123	.125	.195	70° - 90°
	24	.125	.300	.490	124	.000	.125	70° - 90°
	25	.050	.100	.250	125	.075	.075	
	26	.070	.265	.515				
	27	.080	.180	.425				
	28	.150	.300	.400				
'	29	.150	.600	.850				

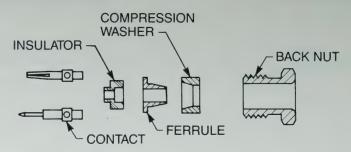
.550

.280

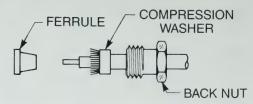
30

.100

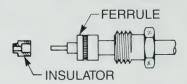
ASSEMBLY PROCEDURE A



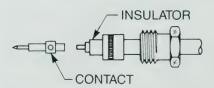
- 1) Trim cable per trim code.
- 2) Tin end of center conductor.
- 3) Slide back nut onto cable.



- 4) Slide compression washer over the braid until it bottoms out on the cable jacket.
- 5) Fan out braid radially against the compression washer by rotating the cable dielectric.

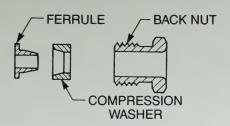


6) Slide ferrule onto cable, over dielectric and under braid. Push into washer until it stops. If necessary trim excess braid flush with surface of compression washer and flange of ferrule.

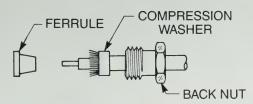


- 7) Install small insulator over cable dielectric.
- 8) Solder contact to center conductor. When contact adapter is also supplied, install contact adapter onto center conductor, then solder contact to center conductor.
- 9) Insert cable assembly into body and tighten body with a torque of 90-100 inch ounces on the 50 ohm impedance sizes and 140-150 inch ounces on the 75 ohm impedance sizes.

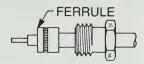
ASSEMBLY PROCEDURE B



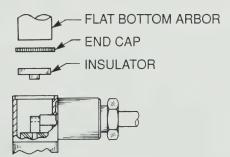
- 1) Trim cable per trim code.
- 2) Tin end of center conductor.
- 3) Slide back nut onto cable.



- 4) Slide compression washer over the braid until it bottoms out on the cable jacket.
- 5) Fan out braid radially against the compression washer by rotating the cable dielectric.

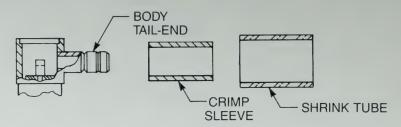


6) Slide ferrule onto cable, over dielectric and under braid. Push into washer until it stops. If necessary trim excess braid flush with surface of compression washer and flange of ferrule.



- 7) Insert cable assembly into body and tighten nut with a torque of 90-100 inch ounces on the 50 ohm impedance sizes and 140-150 inch ounces on the 75 ohm impedance sizes.
- 8) Solder center conductor of cable to contact.
- 9) Place insulator and end cap into connector body as shown and use a .185" diameter flat bottom punch to press cap into place. Cap must be below body surface to seat properly.

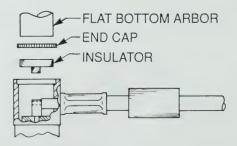
ASSEMBLY PROCEDURE C



- 1) Trim cable per trim code.
- 2) Tin end of center conductor.
- 3) Slide crimp sleeve and shrink tube (if supplied) over cable jacket.
- 4) Flare cable braid out slightly by rotating dielectric.

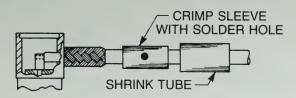


- 5) Insert cable assembly into body tail-end making sure tail goes over dielectric and under braid. Slide in until braid touches rear surface of body.
- 6) Slide crimp sleeve forward and use applicable hex die to crimp sleeve to braid.
- 7) Solder center conductor of cable to contact.



- 8) Place insulator and end cap into connector body as shown and use a .185" diameter flat bottom punch to press cap in place. Cap must be below surface to seat properly.
- 9) Slide shrink tube over crimp sleeve and shrink to fit.

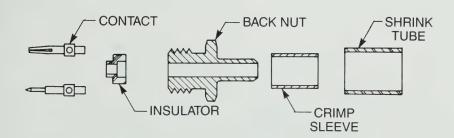
ASSEMBLY PROCEDURE D



Follow procedure C, except step 6. At this step, slide sleeve forward and use applicable hex die to crimp sleeve to braid. Solder braid through cross hole of crimp sleeve.

Proceed with step 7 of procedure C.

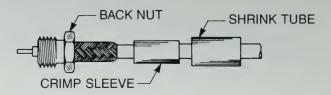
ASSEMBLY PROCEDURE E



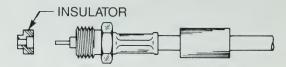
- 1) Trim cable per trim code.
- 2) Tin end of center conductor.
- 3) Slide crimp sleeve and shrink tube over cable jacket.
- 4) Flare cable braid out slightly by rotating dielectric.

(Continued on next page)

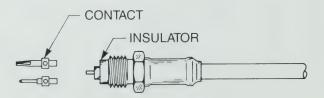
ASSEMBLY PROCEDURE E, (Continued)



- 5) Insert cable into tail-end of back nut, making sure tail goes over dielectric and under braid. Slide in until braid touches rear surface of nut.
- 6) Slide crimp sleeve forward and use applicable hex die to crimp.

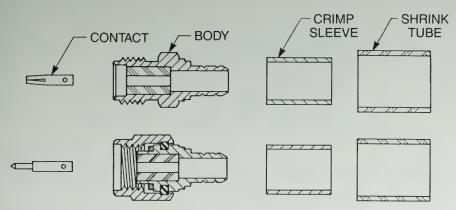


7) Position insulator over cable dielectric and center conductor.

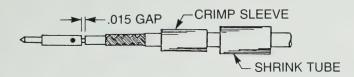


- 8) Solder contact to center conductor.
- 9) Insert cable assembly into body and tighten nut with a torque nut with a torque of 70-100 inch ounces on the 50 ohm impedance sizes and 140-150 inch ounces on the 75 ohm sizes. 35-45 inch ounces for SSMB and SSMC series.
- 10) Slide shrink tube over crimp sleeve and shrink to fit.

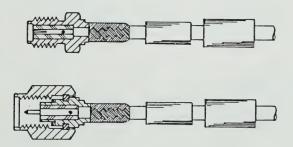
ASSEMBLY PROCEDURE F



- 1) Trim cable per trim code.
- 2) Tin end of center conductor.
- 3) Slide crimp sleeve and shrink tube over cable jacket.
- 4) Flare braid out slightly by rotating dielectric.



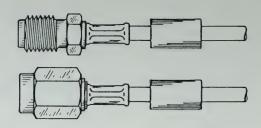
5) Solder contact to center conductor, leaving a .015" gap between rear of contact and cable dielectric.



- 6) Insert cable into tail-end of body, making sure body goes over dielectric and under braid.
- 7) Check interface dimensions of insulator and contact.

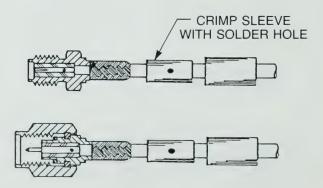
(Continued on next page)

ASSEMBLY PROCEDURE F, (Continued)



- 8) Slide crimp sleeve forward and use applicable hex die to crimp.
- 9) Slide shrink tube over crimp sleeve and shrink to fit.

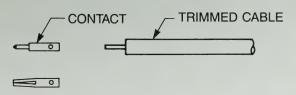
ASSEMBLY PROCEDURE G



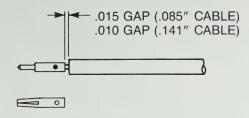
Follow procedure F, except step 8. At this step, slide crimp sleeve forward and use applicable hex die to crimp. Solder braid through cross hole of crimp sleeve.

Proceed with step 9 of procedure F.

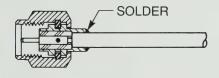
ASSEMBLY PROCEDURE H



1) Trim cable per trim code.



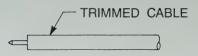
2) Solder contact to center conductor, leaving a gap between rear of contact and cable jacket as shown.



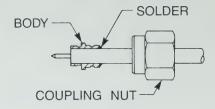


- 3) Insert cable into body until it bottoms. Check that insulator and contact meet interface dimensions.
 - 4) Solder cable jacket to connector body. Do not disturb joint until it has cooled. Clean flux residue.

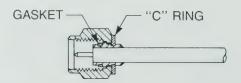
ASSEMBLY PROCEDURE I



- 1) Trim cable per trim code.
- 2) Slide coupling nut onto cable, threads forward.

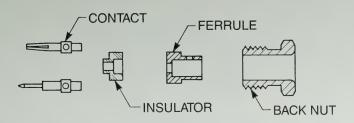


- 3) Insert cable into body until trimmed end is flush with interface. Fixture in this position.
- 4) Solder cable jacket to connector body. Do not disturb joint until it has cooled. Clean flux residue.

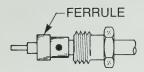


- 5) Install gasket on front face of connector body.
- 6) Slide coupling nut forward and snap on "C" ring.

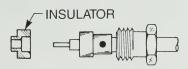
ASSEMBLY PROCEDURE J



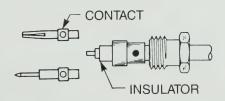
- 1) Trim cable per trim code.
- 2) Slide back nut onto cable.



- 3) Slide ferrule over cable dielectric until it bottoms on the cable jacket.
- 4) Solder ferrule to cable jacket. Do not disturb solder joint until it has cooled.



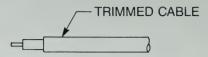
5) Install small insulator over cable dielectric. (only applies for .085 semi-rigid cable)



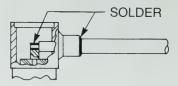
6) Solder contact to center conductor.

7) Insert cable assembly into connector body and tighten to 90-100 inch ounces torque for SMB & SMC, 140-150 inch ounces torque for SMA.

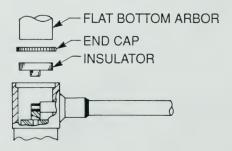
ASSEMBLY PROCEDURE K



- 1) Trim cable per trim code.
- 2) Insert cable into body. Cable jacket should bottom on step inside body and center conductor should lie in slot of contact. Fixture in this position.

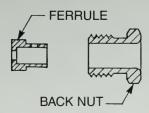


- 3) Solder center conductor to contact.
- 4) Solder cable jacket to connector body. Do not disturb joint until it has cooled. Clean flux residue.

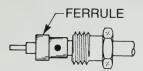


5) Press insulator and end cap into connector body and use a .185" diameter flat bottom punch to press cap in place. Cap must be below body surface to seat properly.

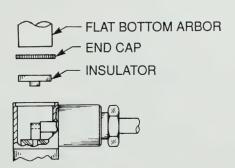
ASSEMBLY PROCEDURE L



- 1) Trim cable per trim code.
- 2) Slide back nut onto cable.



- 3) Slide ferrule over cable dielectric until it bottoms on the cable jacket.
- 4) Solder ferrule to cable jacket. Do not disturb solder joint until it has cooled.
- 5) Insert cable assembly into body and tighten to 90-100 inch ounces torque for SMB & SMC, 140-150 inch ounces torque for SMA.

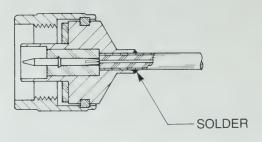


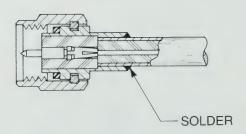
- 6) Solder center conductor to contact.
- 7) Press insulator and end cap into connector body and use a .185" diameter flat bottom punch to press cap in place. Cap must be below body surface to seat properly.

ASSEMBLY PROCEDURE M



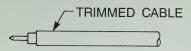
1) Trim cable per trim code.



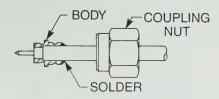


- 2) Insert cable into body until it bottoms, making sure center conductor of cable goes into contact.
- 3) Solder cable jacket to connector body. Do not disturb joint until it has cooled. Clean flux residue.

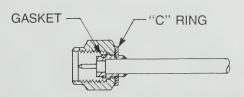
ASSEMBLY PROCEDURE N



- 1) Trim cable per trim code.
- 2) Slide coupling nut onto cable, threads forward.



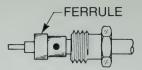
- 3) Insert cable into body until cable dielectric is flush with interface. Cable jacket should bottom on step inside connector body. Fixture in this position.
- 4) Solder cable jacket to connector body. Do not disturb joint until it has cooled. Clean flux residue.



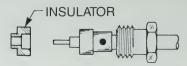
- 5) Install gasket on front face of body.
- 6) Slide coupling nut forward and snap on "C" ring.

ASSEMBLY PROCEDURE P

- 1) Trim cable per trim code.
- 2) Slide back nut onto cable.



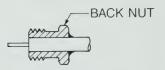
- 3) Slide ferrule over cable dielectric until it bottoms on the cable jacket.
- 4) Solder ferrule to cable jacket. Do not disturb solder joint until it has cooled.



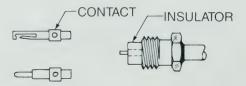
- 5) Install small insulator over cable dielectric (one applies for .085 semi-rigid cable).
- 5a) Trim dielectric flush with ferrule, then point center conductor 70° to 90° (only applies to .141 dia. semi-rigid cable).
- 6) Insert cable assembly into body until it bottoms, making sure center conductor of cable goes into contact.
- 7) Torque body to 90-100 inch ounces.

ASSEMBLY PROCEDURE Q

1) Trim cable per trim code.



2) Slide back nut onto cable until trimmed end of jacket is flush with front of nut. Solder nut to cable.



- 3) Install insulator over cable center conductor.
- 4) Solder contact to center conductor.
- 5) Insert cable assembly into connector body and tighten to 10-15 inch ounces torque.

CROSS REFERENCE—AMPHENOL TO AEP

AMPH.	AEP	AMPH.	AEP	AMPH.	AEP
	9002-1023-001	901-9204-1CCSF		901-9531-1SF	9043-9523-001
	9201-1553-001	901-9204-2CC			9043-1523-003
	9202-1553-001	901-9204-2CCSF			9043-9523-003
	9401-1083-109	901-9204-3CC		901-9601-1	
	9001-1023-006	901-9204-3CCSF		901-9601-1SF	
	9002-1023-006	901-9204-CC			9101-1573-003
	5918-1103-000	901-9204-CCSF			9101-9573-003
	5917-1103-000	901-9204-SF		901-9602-1	
	9231-1553-001	901-9207-1	9401-1083-109		9102-1573-003
901-122	9203-1553-003	901-9209-A	5909-1103-000	901-9610-1	9130-1573-001
901-128	9201-1553-003	901-9209-ASF	5969-9103-000	901-9610-12SF	9130-9573-008
901-129	9202-1553-003	901-9210-1	9463-1083-009	901-9610-1SF	9130-9573-001
901-130	9243-1553-001	901-9210-2	9453-1083-010	901-9610-3	9130-1573-003
901-131-1	9003-1213-001	901-9211	9412-1113-000	901-9610-3SF	9130-9573-003
901-131-2	9003-1213-002	901-9211-SF	9412-9113-000	901-9723	9401-1573-010
901-131-3	9003-1213-003	901-9214-CC	9009-1113-000	901-9808	9401-1583-109
901-132-1	9034-1213-001	901-9214-CC	9009-1113-000	903-284P-525	1002-1571-003
901-132-2	9034-1213-002	901-9215	9404-1113-000	903-284P-52S1	1002-7571-003
901-132-3	9034-1213-003	901-9215-3	9104-1213-000	903-285P-51S	2002-1571-003
901-133-1	9035-1513-001	901-9215-3CC	9104-1113-000	903-287P-51S	2002-1571-002
901-133-2	9035-1513-002	901-9215-SF	9404-9113-000	903-288P-52A	1105-1521-003
901-133-3	9035-1413-003	901-9216	5916-1103-603	903-289P-51A	2105-1521-003
901-139	9210-1553-004	901-9216-SF	5916-9103-603	903-291P-51A	2105-1521-002
901-140	9243-1553-003	901-9217	5917-1103-603	903-297J-51S	2003-1571-003
901-143	9647-1513-000	901-92174-CCSF.	9009-9113-000	903-305J-51R	2004-1511-000
901-144	9650-1113-000	901-9217-SF	5917-9103-603		1105-7521-008
	9031-1023-001	901-9219-A			2105-7521-003
	9031-1023-006	901-9219-ASF			2105-7521-002
	9301-1063-109	901-9220			2105-7521-008
	5909-1103-000	901-9220-SF			2002-7571-003
	9001-1023-004	901-9221-1A			2002-7571-002
	9009-1213-000	901-9221-1ASF			2010-1511-000
	9009-1113-000	901-9221-2A			2109-7511-000
	9104-1213-000	901-9221-2ASF			1010-1511-003
	9104-1113-000	901-9224-3			1010-7511-001
	9108-1213-000	901-9501-1			2019-1511-000
	9108-1113-000	901-9501-3			2014-1511-000
901-220	9231-1553-004	901-9511-1			1019-1511-000
	9008-1113-000	901-9511-1			2003-1571-008
	9008-9113-000	901-9511-12SF			2009-1511-000
	9301-1063-009	901-9511-1SF			2106-1521-003
	9301-7063-009	901-9511-3		903-496J-51S	2009-7511-000
	9401-1083-010	901-9511-3	9001-1023-003		
	9401-7083-010	901-9511-3SF			
	9402-1083-009	901-9521-1			
	9402-1083-010	901-9521-3			
901-9204	9004-1213-000	901-9531-1	9043-1523-001		

901-9531-12.....9043-1523-008 901-9531-12SF......9043-9523-008

901-9204-CC.....9004-1113-000

901-9204-1CC.....9204-1113-002

CROSS REFERENCE—CONNECTING DEVICES (CDI) TO AEP

Please note that the part numbers shown here are functional equivalents which may not be 100% carbon copies of the CDI parts shown. Please call us if you have questions about specific dimensions.

A note about plating: In order to save space, CDI part numbers and AEP part numbers are shown for gold plating. CDI part numbers with SF at the end are passivated; AEP part numbers for passivated finish are shown with each connector in the catalogue.

CDI	AEP	CDI	AEP	CDI	AEP
5032	9008-1113-000	5280-4	9610-1213-003	5691	9007-1213-000
5110CC	9412-1113-000	5285-1	9401-1083-109	5691CC	9007-1113-000
5111CC	9422-1113-000	5286-1	9402-1083-009	5692	9107-1213-000
5130CC	9432-1113-000	5289-1	9453-1083-009	5692CC	9107-1113-000
5170CC	5909-1103-000	5293CC	9413-1113-000	5720-1	9002-1023-001
5191CC	5917-1103-000	5294CC	9013-1113-000	5720-2	9002-1023-003
5208-1	9208-1213-000	5295CC	9456-1113-002	5721-1	9030-1023-001
5208-1CC	9208-1113-000	5299CC	5916-1103-603	5721-2	9030-1023-003
5208-2	9208-1213-001	5308-1CC	9304-1113-004	5730-1	9001-1023-001
5208-2CC	9208-1113-001	5308-2CC	9304-1113-013	5730-2	9001-1023-003
5208-3	9208-1213-002	5309-1CC	9308-1113-003	5760-1	9204-1213-002
5208-3CC	9208-1113-002	5309-2CC	9308-1113-001	5760-1CC	9204-1113-002
5210-1CC	9408-1113-002	5319	9301-1063-009	5760-2	9204-1213-001
5210-3CC	9408-1113-000	5319-1	9301-1063-009	5760-2CC	9204-1113-001
5211CC	9455-1113-000	5320-1	9034-1213-001	5760-3	9204-1213-003
5220	9004-1213-000	5320-2	9034-1213-002	5760-3CC	9204-1113-003
5220CC	9004-1113-000	5320-4	9034-1213-003	5762	9104-1213-000
5224-2CC	9431-1583-010	5339CC	9409-1113-000	5762CC	9104-1113-000
5225-2CC	9441-1583-010	5340	9009-1213-000	5850-1CC	9443-1563-009
5228-1	9431-1083-009	5340CC	9009-1113-000	5850-2CC	9443-1563-010
5228-2	9431-1083-010	5341	9055-1213-000	5851-1CC	9043-1523-001
5229-1	9441-1083-009	5341CC	9055-1113-000	5851-2CC	9043-1523-003
5229-2	9441-1083-010	5343	9155-1213-000	5921	9076-1213-000
5240-1	9003-1213-001	5343CC	9155-1113-000	5921CC	9076-1113-000
5240-2	9003-1213-002	5348	9109-1213-000	5922	9176-1213-000
5240-4	9003-1213-003	5348CC	9109-1113-000	5922CC	9176-1113-000
5250	9108-1213-000	5390CC	5918-1103-000	5924CC	9476-1113-000
5250CC	9108-1113-000	5680-1CC	9504-9113-009	8009-1	4000-1563-009
5260CC	9404-1113-000	5680-2CC	9504-9113-031	8009-2	4000-1563-010
5280-1	9610-1213-001	5681-1CC	9508-9113-001	8011-1	4501-9543-009
5280-2	9610-1213-002	5681-2CC	9508-9113-002	8011-2	4501-9543-010

CROSS REFERENCE—OMNI-SPECTRA (OSM) TO AEP

Please note that the part numbers shown here are functional equivalents which may not be 100% carbon copies of the OSM part numbers shown. Please call us if you have questions about specific dimensions.

A note about plating: In order to save space, OSM part numbers are shown without plating dash numbers, and the AEP gold-plated part number is shown. In a few cases where standard OSM plating is other than gold, the AEP part number is shown with the same plating as the OSM part. In general, the OSM plating dash numbers are: -00 (Gold plated stainless steel), -02 (Passivated stainless steel), -09 (Gold plated brass), and -10 (Nickel plated brass). Alternate plating part numbers are shown with each AEP part number in this catalogue.

OSM	AEP	OSM	AEP	OSM	AEP
2001-5003	9401-1083-109	2006-7195	9231-1553-004	2037-5006	9043-1533-003
2001-5009	9401-1083-010	2006-7941	9431-1083-009	2037-5007	9043-1523-001
2001-5025	9301-1063-009	2007-7141	9243-1553-001	2037-5008	9043-1523-003
2001-5031	9301-1063-009	2007-7188	9243-1553-003	2037-5009	9043-1523-004
2001-5032	9401-1083-010	2007-7195	9243-1553-004	2037-5056	9043-1523-006
2001-6110	9620-9003-151	2007-7941	9443-1563-009	2037-5100	9043-1523-002
2001-6112	9620-9003-151	2007-7985	9443-1563-010	2051-0000	9409-1113-000
2001-6113	9620-9003-151	2031-5002	9001-1033-001	2051-1200	9009-1213-000
2001-6500	9620-9003-151	2031-5003	9001-1033-003	2051-1201	9009-1113-000
2001-7141	9201-1553-001	2031-5005	9001-1023-001	2051-1350	9455-1113-000
2001-7188	9201-1553-003	2031-5006	9001-1023-003	2051-1351	9055-1213-000
2001-7195	9201-1553-004	2031-5011	9101-1573-001	2051-1352	9055-1113-000
2001-7841	9501-1593-009	2031-5012	9101-1573-003	2051-1610	9209-1113-000
2001-7885	9501-1593-010	2031-5013	9101-1573-004	2051-1612	9209-1113-001
2001-7941	9301-1063-009	2031-5055	9001-1023-006	2051-1614	9209-1113-002
2001-7985	9401-1083-010	2031-5056	9101-1573-006	2051-1618	9109-1113-000
2002-5015	9402-1083-009	2031-5102	9101-1573-002	2051-1658	9155-1113-000
2002-5016	9402-1083-010	2032-5002	9002-1033-001	2051-3350	9047-9513-000
2002-7141	9202-1553-001	2032-5003	9102-1573-003	2051-3351	9147-9513-000
2002-7188	9202-1553-003	2032-5004	9002-1033-003	2051-3352	9051-9513-000
2002-7195	9202-1553-004	2032-5007	9102-1573-001	2051-3353	9151-9513-000
2002-7841	9502-1593-009	2032-5010	9102-1573-004	2051-3354	9046-9513-000
2002-7885	9502-1593-010	2032-5021	9102-1573-006	2051-3355	9146-9513-000
	9230-1553-001	2032-5026	9102-1573-002	2051-3356	9050-9513-000
2004-7188	9230-1553-003	2034-5004	9130-1573-001	2051-3357	
2004-7195	9230-1553-004	2034-5005	9130-1573-003	2052-0000	
2004-7841	9530-1593-009	2034-5006	9130-1573-004	2052-0434	
2004-7885	9530-1593-010	2034-5007	9030-1033-001	2052-0435	
	9453-1083-009	2034-5008		2052-1200	
2004-7985	9453-1083-010	2034-5023	9130-1573-006	2052-1201	
2006-5006	9531-1593-009	2034-5031		2052-1215	
2006-5010	9441-1083-010	2036-5003		2052-1216	
	9431-1083-010	2036-5004		2052-1300	
	9441-1083-009	2036-5005		2052-1350	
	9531-1083-010	2036-5014		2052-1351	
	9231-1553-001	2036-5016		2052-1352	
2006-7188	9231-1553-003	2037-5005	9043-1533-001	2052-1608	9176-1113-000

CROSS REFERENCE—OMNI-SPECTRA (OSM) TO AEP, (Continued)

OSM	AEP	OSM	AEP	OSM	AEP
2052-1610	9204-1113-002	2068-5158	9035-1513-003	3234-7188	6501-7071-003
2052-1612	9204-1113-001	2080-0000	5917-1103-000	3281-2221	5403-1501-000
2052-1614	9204-1113-003	2081-0000	5918-1103-000	3281-2223	5405-1501-000
2052-1618	9104-1113-000	2082-5133	5916-1103-603	3282-2222	5402-1501-000
2052-1650	9208-1113-000	2084-0000	5909-1103-000	3282-2224	5404-1501-000
2052-1652	9208-1113-001	2086-0000	5919-1503-003	3604-7841	4501-9543-009
2052-1654	9208-1113-002	2088-0000	5919-1503-000	3604-7885	4501-9543-010
2052-1658	9108-1113-000	2098-0294	920-69	5001-5015	1002-1551-003
2052-1688	9107-1113-000	2098-3250	920-55	5001-5027	1002-1551-002
2052-3324	9508-9113-003	2098-3251	920-56	5004-5005	1003-1551-003
2052-3326	9504-9113-034	3001-7188	4000-7051-003	5004-5012	1003-1551-002
2052-3350	9045-9513-000	3001-7841	4000-1563-009	5007-5008	1005-1551-003
2052-3351	9145-9513-000	3001-7885	4000-1563-009	5007-5016	1005-1551-002
2052-3352	9049-9513-000	3001-7941	4000-1563-009	5008-5001	1006-1551-003
2052-3353	9149-9513-000	3001-7985	4000-1563-010	5008-5002	1006-1551-002
	9044-9513-000		4501-7051-001	5013-5001	1001-1551-003
	9144-9513-000		4501-7051-003	5013-5002	1001-1551-002
	9048-9513-000		4501-7051-001	5031-5004	1001-1571-003
	9148-9513-000		4501-7051-003		1002-1571-002
	9504-9113-009		4501-9543-009		1002-1571-003
	9508-9113-001		4501-9543-010		1001-1571-002
	9504-9113-031		4501-9543-009		1003-1571-002
	9508-9113-002		4501-9543-010		1003-1571-003
	9308-1113-001		4000-7071-001		1105-1521-003
	9308-1113-003		4000-7071-006		1105-1521-002
	9424-1513-000		4000-7071-003		1106-1521-003
	9412-1113-000		4501-7071-003		1106-1521-003
	9432-1113-000		4501-7071-006		1484-1511-000
	9456-1113-002		4501-7071-003		1004-1511-000
	9422-1113-000		4501-7071-003		1019-1511-000
	9013-1113-000		4501-7071-001		1009-1511-000
	9513-9113-009		4501-7071-008		1025-1511-000
	9513-9113-012		6000-7051-003		1010-1511-000
	9609-1513-000		6000-7051-003		1042-1511-000
	9650-1113-000		6000-7031-003		5813-1501-000
	9650-1113-000		6000-7071-001		5813-1501-000
			6000-7071-008		
	9610-1213-001				5822-1501-000
			6001-7071-001		2002-1551-003
	9610-1213-003				2002-1551-002
	9003-1213-001		6001-7071-003		2001-1551-003
	9003-1213-002		6500-7051-003		2001-1551-002
	9003-1213-003		6501-7051-003		2003-1551-003
	9034-1213-001		6500-7071-001		2003-1551-002
	9034-1213-002		6500-7071-006		2005-1551-003
	9034-1213-003		6500-7071-003		2005-1551-002
	9035-1513-002		6501-7071-001		
2068-5157	9035-1513-001	3234-7158	6501-7071-006	5110-5002	2006-1551-002

CROSS REFERENCE—OMNI-SPECTRA (OSM) TO AEP, (Continued)

OSM	AEP	OSM	AEP	OSM	AEP
5131-5007	2002-1571-003	5163-5001	2025-1511-000	5207-5002	3005-1551-002
5131-5011	2002-1571-002	5164-5003	2010-1511-000	5210-5002	3006-1551-003
5132-5001	2001-1571-003	5164-5011	2110-1511-000	5210-5004	3006-1551-002
5132-5003	2001-1571-002	5165-5001	2042-1511-000	5231-5001	3002-1571-003
5134-5002	2003-1571-003	5180-0000	5213-1501-000	5231-5002	3002-1571-002
5134-7196	2003-1571-002	5181-0000	5216-1501-000	5237-5002	3105-1521-003
5137-5010	2105-1521-003	5184-0000	5222-1501-000	5237-5003	3105-1521-002
5137-5011	2105-1521-002	5201-5004	3002-1551-003	5256-5002	3004-1511-000
5140-5004	2106-1521-003	5201-5005	3002-1551-002	5257-5008	3017-1511-000
5140-5005	2106-1521-002	5202-5004	3001-1551-003	5258-5010	3019-1511-000
5152-0000	2484-1511-000	5202-5005	3001-1551-002	5262-5001	3009-1511-000
5156-0000	2004-1511-000	5204-5006	3003-1551-003	5263-5008	3025-1511-000
5157-5006	2017-1511-000	5204-5007	3003-1551-002	5264-5001	3010-1511-000
5158-5010	2019-1511-000	5207-5001	3005-1551-003	5265-5003	3042-1511-000
5162-5013	2009-1511-000				

CROSS REFERENCE—SEALECTRO TO AEP

Please note that the part numbers shown here are <u>functional equivalents</u> which may not be 100% carbon copies of the Sealectro parts shown. Please call us if you have questions about specific dimensions.

A note about plating: In order to save space, Sealectro parts numbers are shown without plating dash numbers, and the AEP gold-plated part number is shown. In general, the Sealectro plating dash numbers are: -22 or -229 (Gold plated brass), -31 or -319 (Gold plated stainless steel), -89 (Passivated stainless steel), and -91 or -919 (Nickel plated brass). Alternate plating part numbers are shown with each AEP part in this catalogue.

SEAL	AEP	SEAL	AEP	SEAL	AEP
50-007-0000	1002-1551-003	50-052-0000	1025-1511-000	50-173-6900	5307-1501-000
50-007-3196	1002-1551-002	50-053-0000	1010-1511-001	50-174-6700	5006-1501-000
50-007-9702	1002-1541-010	50-054-0000	1042-1511-000	50-174-6800	5406-1501-000
50-007-9703	1002-1541-009	50-056-2211	1029-1211-001	50-174-6900	5306-1501-000
50-008-0000	1001-1551-003	50-056-2213	1029-1211-002	50-175-0000	5722-1501-000
50-008-3196		50-056-2215	1029-1211-003	50-175-6701	5614-1501-000
50-008-9702	1001-1541-010	50-058-2211	1092-1511-001	50-175-6801	5514-1501-000
50-008-9703	1001-1541-009	50-058-2213	1092-1511-002	50-175-6901	5114-1501-000
50-010-0000	1003-1551-003	50-058-2215	1092-1511-003	50-177-6701	5615-1501-000
50-010-3196	1003-1551-002	50-072-0000	5813-1501-000	50-177-6801	5515-1501-000
50-010-9702	1003-1541-010	50-073-0000	5816-1501-000	50-177-6901	5115-1501-000
50-010-9703	1003-1541-009	50-073-6700	5003-1501-000	50-183-0000	5707-1501-000
50-011-0000	1005-1551-003	50-073-6800	5403-1501-000	50-185-0000	5715-1501-000
50-011-3196	1005-1551-002	50-073-6900	5303-1501-000	50-311-3188	1005-1551-003
50-011-9702	1005-1541-010	50-074-6700	5002-1501-000	50-311-3196	1005-1551-002
50-011-9703	1005-1541-009	50-074-6800	5402-1501-000	50-328-3188	1105-1521-003
50-012-0000	1006-1551-003	50-074-6900	5302-1501-000	50-328-3196	1105-1521-002
50-012-3196	1006-1551-002	50-075-0000	5822-1501-000	50-604-9702	9531-1593-010
50-012-9702	1006-1541-010	50-075-6701	5610-1501-000	50-604-9703	9531-1593-009
50-012-9703	1006-1541-009	50-075-6801	5510-1501-000	50-607-3141	9201-1553-001
50-024-0000	1002-1571-003	50-075-6901	5110-1501-000	50-607-3188	9201-1553-003
50-024-3196	1002-1571-002	50-083-0000	5807-1501-000	50-607-9702	9501-1593-010
50-025-0000	1001-1571-003	50-084-0000	5808-1501-000	50-607-9703	9501-1593-009
50-025-3196	1001-1571-002	50-085-0000	5815-1501-000	50-608-3141	9202-1553-001
50-027-0000	1003-1571-003	50-107-0000	1702-1551-004	50-608-3188	9202-1553-003
50-027-3196	1003-1571-002	50-108-0000	1701-1551-004	50-610-3141	9230-1553-001
50-028-0000	1105-1521-003	50-110-0000	1703-1551-004	50-610-3188	9230-1553-003
50-028-3196	1105-1521-002	50-111-9511	1705-1551-004	50-610-9702	9530-1593-010
50-030-0000	1106-1521-003	50-124-0000	1702-1571-004	50-610-9703	9530-1593-009
50-030-3196	1106-1521-002	50-125-0000	1701-1571-004	50-611-3141	9243-1553-001
50-043-0000	1004-1511-000	50-127-0000	1703-1571-004	50-611-3188	9243-1553-003
50-045-0000	1019-1511-000	50-128-9511	1715-1521-004	50-611-9702	9543-1593-010
50-045-4504	1484-1511-000	50-143-0000	1704-1511-000	50-611-9703	9543-1593-009
50-045-9340	1486-1511-000	50-145-0000	1719-1511-000	50-622-9141	9001-1023-006
50-046-0000		50-151-0000		50-622-9142	
50-047-0000		50-153-0000	1710-1511-000	50-622-9188	9001-1023-003
50-048-0000		50-173-6700		50-624-9141	
50-051-0000	1009-1511-000	50-173-6800	5407-1501-000	50-624-9142	9101-1573-001

SEALECTRO TO AEP (Continued)

SEAL	AEP	SEAL	AEP	SEAL	AEP
50-624-9188	9101-1573-003	50-653-0000	9647-1513-000	51-047-9340	2490-1511-000
50-625-9141	9102-1573-006	50-654-0000	9646-1513-000	51-048-0000	2097-1511-000
50-625-9142	9102-1573-001	50-656-2211	9003-1213-001	51-049-0000	2014-1511-000
50-625-9188	9102-1573-003	50-656-2213	9003-1213-002	51-051-0000	2009-1511-000
50-627-9141		50-656-2215	9003-1213-003	51-052-0000	2025-1511-000
50-627-9142	9130-1573-001	50-656-9211	9610-1213-001	51-053-0000	2010-1511-002
50-627-9188	9130-1573-003	50-656-9213	9610-1213-002	51-054-0000	2042-1511-000
50-628-9141	9043-1523-006	50-656-9215	9610-1213-003	51-056-2211	2029-1211-001
50-628-9142	9043-1523-001	50-658-2211	9035-1513-001	51-056-2213	2029-1211-002
50-628-9188	9043-1523-003	50-658-2213	9035-1513-002	51-056-2215	2029-1211-003
50-641-9141	9131-1573-006	50-658-2215	9035-1513-003	51-058-2211	2092-1211-001
50-641-9142	9131-1573-001	50-672-0000	5917-1103-000	51-058-2213	2092-1211-002
50-641-9188	9131-1573-003	50-673-0000	5918-1103-000	51-058-2215	2092-1211-003
50-642-3141	9231-1553-001	50-674-0000	5916-1103-603	51-072-0000	5213-1501-000
50-642-3188	9231-1553-003	50-675-0000	5909-1103-000	51-073-0000	5216-1501-000
50-643-0000	9412-1113-000	50-678-0000	5919-1503-000	51-073-6700	5005-1501-000
50-643-4310	9013-1113-000	50-683-0000	5903-1503-000	51-073-6800	5405-1501-000
50-643-4312	9456-1113-000	50-685-0000	5905-1503-000	51-073-6900	5305-1501-000
50-643-4314	9413-1113-000	51-007-0000	2002-1551-003	51-074-6700	5004-1501-000
50-643-5005	9432-1113-000	51-007-3196	2002-1551-002	51-074-6800	5404-1501-000
50-645-0000	9422-1113-000	51-008-0000	2001-1551-003	51-074-6900	5304-1501-000
50-645-4504	9404-1113-000	51-008-3196	2001-1551-002	51-075-0000	5222-1501-000
50-645-4518	9108-1213-000	51-009-0000	2028-1551-003	51-075-6701	5612-1501-000
50-645-4520	9004-1113-000	51-009-3196	2028-1551-002	51-075-6801	5512-1501-000
50-645-4521	9004-1213-000	51-010-0000	2003-1551-003	51-075-6901	5112-1501-000
50-645-4524	9408-1113-000	51-010-3196	2003-1551-002	51-083-0000	5207-1501-000
50-645-4526	9408-1113-002	51-012-0000	2006-1551-003	51-084-0000	5208-1501-000
50-645-4528	9108-1113-000	51-012-3196	2006-1551-002	51-085-0000	5215-1501-000
50-645-4540	9008-1113-000	51-024-0000	2002-1571-003	51-107-0000	2702-1551-004
50-645-4541	9008-1213-000	51-024-3196	2002-1571-002	51-108-0000	2701-1551-004
50-645-4545	9308-1113-001	51-025-0000	2001-1571-003	51-110-0000	2703-1551-004
50-645-4547	9304-1113-013	51-025-3196	2001-1571-002	51-111-9511	
50-645-4556	9308-1113-003	51-026-0000	2028-1571-003	51-124-0000	
50-645-4557	9304-1113-014	51-026-3196	2028-1571-002	51-125-0000	
50-645-4575	9104-1113-000	51-027-0000	2003-1571-003	51-127-0000	
50-645-4576	9104-1213-000	51-027-3196		51-128-9511	
50-646-4504	9409-1113-000	51-028-0000	2105-1521-003	51-143-0000	2704-1511-000
50-646-4520	9009-1113-000	51-028-3196	2105-1521-002	51-145-0000	
50-646-4521	9009-1213-000	51-030-0000	2106-1521-003	51-149-0000	
50-646-4524	9455-1113-000	51-030-3196		51-151-0000	
50-646-4540	9055-1113-000	51-043-0000	2004-1511-000	51-152-0000	
50-646-4541	9055-1213-000	51-044-0000		51-153-0000	
50-647-0000	9609-1513-000	51-045-0000		51-173-6700	
50-647-4504	9424-1513-000	51-045-4504		51-173-6800	
50-648-4504		51-045-9340		51-173-6900	
50-651-0000		51-046-0000		51-174-6700	
50-652-0000	9649-1113-000	51-047-0000	2012-1511-000	51-174-6800	5408-1501-000

SEALECTRO TO AEP (Continued)

SEAL	AEP	SEAL	AEP	SEAL	AEP
51-174-6900	5308-1501-000	52-010-3196	3003-1551-002	52-044-0000	3048-1511-000
51-175-0000	5732-1501-000	52-010-4210	3003-1551-503	52-044-4210	3048-1511-500
51-175-6701	5616-1501-000	52-010-4220	3003-1551-603	52-044-4220	3048-1511-600
51-175-6801	5516-1501-000	52-010-4230	3003-1551-703	52-044-4230	3048-1511-700
51-175-6901	5116-1501-000	52-010-9039	3003-1551-502	52-045-0000	3019-1511-000
51-177-6701	5617-1501-000	52-010-9040	3003-1551-602	52-045-4210	3019-1511-500
51-177-6801	5517-1501-000	52-010-9041	3003-1551-702	52-045-4220	3019-1511-600
51-177-6901	5117-1501-000	52-012-0000	3006-1551-003	52-045-4230	3019-1511-700
51-183-0000	5727-1501-000	52-012-3196	3006-1551-002	52-046-0000	3017-1511-000
51-185-0000	5725-1501-000	52-012-4210	3006-1551-503	52-046-4210	3017-1511-500
51-311-3188	2005-1551-003	52-012-4220	3006-1551-603	52-046-4220	3017-1511-600
51-311-3196	2005-1551-002	52-012-4230	3006-1551-703	52-046-4230	3017-1511-700
51-328-3188	2105-1521-003	52-012-9039	3006-1551-502	52-047-0000	3012-1511-000
51-328-3196	2105-1521-002	52-012-9040	3006-1551-602	52-048-0000	3097-1511-000
51-424-3188	7202-1572-003	52-012-9041	3006-1551-702	52-049-0000	3014-1511-000
51-424-3196	7202-1572-002	52-024-0000	3002-1571-003	52-049-4210	3014-1511-500
51-424-3701	7202-1542-021	52-024-3196	3002-1571-002	52-049-4220	3014-1511-600
51-424-3702	7202-1542-010	52-025-0000	2001-1571-003	52-049-4230	3014-1511-700
51-427-3188	7203-1571-003	52-025-3196	2001-1571-002	52-051-0000	3009-1511-000
51-427-3196	7203-1571-002	52-026-0000	3028-1571-003	52-052-0000	3025-1511-000
51-427-3701		52-026-3196	3028-1571-002	52-052-2700	3025-1511-005
51-427-3702		52-026-4210	3028-1571-503	52-053-0000	3010-1511-003
51-428-3188	7405-1521-003	52-026-4220	3028-1571-603	52-054-0000	3042-1511-000
51-428-3196	7405-1521-002	52-026-4230	3028-1571-703	52-054-2700	3042-1511-006
51-428-3701	7405-1561-021	52-026-9039	3028-1571-502	52-311-3188	3005-1551-003
51-428-3702	7405-1561-010	52-026-9040	3028-1571-602	52-311-3196	3005-1551-002
51-443-0000	7204-1511-000	52-026-9041	3028-1571-702	52-328-3188	3105-1521-003
51-445-0000	7219-1511-000	52-027-0000	3003-1571-003	52-328-3196	3105-1521-002
51-445-4504	7498-1513-000	52-027-3196	3003-1571-002	52-424-3188	7302-1572-003
51-445-4524	7499-1513-000	52-027-4210	3003-1571-503	52-424-3196	7302-1572-002
51-447-0000	7212-1511-000	52-027-4220	3003-1571-603	52-424-3701	7302-1542-021
51-451-0000	7209-1511-000	52-027-4230	3003-1571-703	52-424-3702	7302-1542-010
51-453-0000	7210-1511-000	52-027-9039	3003-1571-502	52-428-3188	7305-1521-003
51-475-0000	7222-1501-000	52-027-9040	3003-1571-602	52-428-3196	7305-1521-002
52-007-0000	3002-1551-003	52-027-9041	3003-1571-702	52-428-3701	7305-1561-021
52-007-3196	3002-1551-002	52-030-0000	3106-1521-003	52-428-3702	7305-1561-010
52-008-0000	3001-1551-003	52-030-3196	3106-1521-002	52-446-0000	7317-1512-000
52-008-3196	3001-1551-002	52-030-4210	3106-1521-503	52-452-0000	7325-1512-000
52-009-0000	3028-1551-003	52-030-4220	3106-1521-603	52-454-0000	7342-1511-000
52-009-3196	3028-1551-002	52-030-4230	3106-1521-703	55-013-0000	8021-1051-003
52-009-4210	3028-1551-503	52-030-9039	3106-1521-502	55-013-3196	8021-1051-002
52-009-4220	3028-1551-603	52-030-9040	3106-1521-602	55-018-0000	8020-1551-003
52-009-4230			3106-1521-702	55-018-3196	
52-009-9039		52-043-0000	3004-1511-000	55-019-0000	8044-1551-003
52-009-9040			3004-1511-500	55-019-3196	
52-009-9041			3004-1511-600	55-020-0000	
52-010-0000		52-043-4230	3004-1511-700	55-020-3196	

SEALECTRO TO AEP (Continued)

SEAL	AEP	SEAL	AEP	SEAL	AEP
55-021-0000	8045-1551-003	55-607-9172	9401-1083-010	57-007-3073	4000-1563-009
55-021-3196	8045-1551-002	55-607-9173	9401-1083-109	57-007-3196	4000-1051-002
55-031-0000	8021-1071-003	55-608-2002	9402-1083-010	57-007-3702	4000-1563-010
55-031-3196	8021-1071-002	55-608-2003	9402-1083-009	57-007-3703	4000-1563-009
55-036-0000	8020-1571-003	55-608-3702	9402-1083-010	57-007-9072	4000-1563-010
55-036-3196	8020-1571-002	55-608-3703	9402-1083-009	57-007-9073	4000-1563-009
55-037-0000	8144-1521-003	55-608-9172	9402-1083-010	57-010-0000	4501-1051-003
55-037-3196	8144-1521-002	55-608-9173	9402-1083-009	57-010-3072	4501-9543-010
55-038-0000	8146-1521-003	55-608-9182	9402-1083-010	57-010-3073	4501-9543-009
55-038-3196	8146-1521-002	55-608-9183	9402-1083-009	57-010-3196	4501-1051-002
55-039-0000	8145-1521-003	55-610-3702	9453-1083-010	57-010-3702	4501-9543-010
55-039-3196	8145-1521-002	55-610-3703	9453-1083-009	57-010-3703	4501-9543-009
55-604-3702	9431-1083-010	55-610-9172	9453-1083-010	57-010-9072	4501-9543-010
55-604-3703	9431-1083-009	55-610-9173	9453-1083-009	57-010-9073	4501-9543-009
55-604-9072:	9441-1083-010	55-611-3702	9443-1563-010	58-007-0000	6500-1051-003
55-604-9073	9441-1083-009	55-611-3703	9443-1563-009	58-007-3196	6500-1051-002
55-604-9172	9431-1083-010	55-622-9141	9001-1033-001	58-010-0000	6501-1051-003
55-604-9173	9431-1083-009	55-622-9188	9001-1033-003	58-010-3196	6501-1051-002
55-604-9272	9441-1083-010	55-623-9141	9002-1033-001	59-007-0000	6000-1051-003
	9441-1083-009	55-623-9188	9002-1033-003	59-007-3196	6000-1051-002
55-607-0109	9301-1063-009	55-624-2003	9301-1063-109	59-010-0000	6001-1051-003
55-607-0369	9301-1063-009	55-624-3073	9301-1063-109	59-010-3196	6001-1051-002
55-607-2003	9301-1063-009	55-624-3703	9301-1063-109	60-001-0501	1036-1511-051
55-607-2203	9401-1083-109	55-624-9073	9301-1063-109	60-001-0502	1736-1511-075
55-607-3073	9301-1063-009	55-628-9141	9043-1533-001	60-601-0000	9620-9003-151
55-607-3702	9401-1083-010	55-628-9188	9043-1533-003	61-001-0501	2036-1511-051
55-607-3703	9301-1063-009	57-007-0000	4000-1051-003	61-001-0502	2736-1511-075
55-607-9073	9301-1063-009	57-007-3072	4000-1563-010		

CROSS REFERENCE—SOLITRON TO AEP

Please note that the part numbers shown here are for functional equivalents which may not be 100% carbon copies of the Solitron numbers shown. Please call us if you have questions about specific dimensions.

A note about plating: In order to save space, Solitron part numbers are shown for gold plated parts only, as are AEP equivalents. The letters SF preceding a Solitron number indicate passivated finish. Alternate finish part numbers are shown with each AEP part number in this catalogue.

S/M	AEP	S/M	AEP	S/M	AEP
2200-0008	1002-1551-003	2312-0008	2105-1521-003	2902-6080	9401-1083-109
2201-0008	1002-1551-002	2313-0008	2105-1521-002	2902-6093	9401-1083-109
2202-0008	1002-1571-003	2331-0001	2003-1551-003	2903-6001	9001-1023-003
2203-0008	1002-1571-002	2332-0001	2003-1551-002	2903-6019	9001-1023-005
2210-0008	1005-1551-003	2333-0001	2003-1571-003	2903-6027	9001-1023-002
2210-0009	1005-1551-003	2334-0001	2003-1571-002	2903-6035	9001-1023-008
2211-0008	1005-1551-002	2340-0002	2001-1551-003	2903-6041	9201-1553-004
2211-0009	1005-1551-002	2341-0002	2001-1551-002	2903-6088	9001-1023-003
2212-0008	1105-1521-003	2342-0009	2001-1571-003	2903-6094	9001-1033-003
2213-0008	1105-1521-002	2343-0009	2001-1571-002	2903-6097	9201-1553-003
2231-0001	1003-1551-003	2360-0002	2004-1511-000	2903-6098	9001-1023-001
2232-0001	1003-1551-002	2360-0003	2019-1511-000	2903-6099	9001-1023-006
2233-0001	1003-1571-003	2362-0001	2014-1511-000	2903-6901	9001-1023-008
2234-0001	1003-1571-002	2370-0003	2012-1511-000	2903-6903	9001-1023-003
2240-0002	1001-1551-003	2385-0001	2009-1511-000	2903-6904	9001-1023-002
2241-0002	1001-1551-002	2385-0013	2010-1511-000	2903-6905	9001-1023-005
2242-0009	1001-1571-003	2387-0001	2025-1511-000	2903-6906	9001-1023-001
2243-0009	1001-1571-002	2387-0004	2010-1511-000	2906-6005	9401-1083-010
2260-0002	1004-1511-000	2390-0003	5222-1501-000	2906-6016	9401-1083-010
2260-0003		2390-0005	5213-1501-000	2906-6027	9401-1083-010
2270-0003	1012-1511-000	2391-0001	5216-1501-000	2906-6056	9401-1083-010
2285-0001	1009-1511-000	2900-6008	9101-1573-001	2906-6072	9401-1083-010
2285-0013	1010-1511-000	2900-6009	9101-1573-006	2906-6073	9501-1593-010
2287-0001	1025-1511-000	2900-6010	9101-1573-003	2906-6075	9401-1083-010
2287-0004	1042-1511-000	2900-6011	9101-1573-004	2906-6077	9401-1083-010
2290-0003	5822-1501-000	2900-6012	9101-1573-002	2910-6077	9043-1533-001
2290-0005	5813-1501-000	2900-6064	9001-1033-001	2910-6079	9243-1553-001
2291-0001	5816-1501-000		9001-1023-001	2912-6001	9443-1563-009
2300-0008	2002-1551-003		9201-1553-001	2913-6001	9043-1523-003
2301-0008	2002-1551-002		9001-1023-006	2913-6007	9043-1523-005
2302-0008	2002-1571-003		9301-1063-009	2913-6015	9243-1553-003
2303-0008			9301-1063-009	2913-6017	9043-1523-001
2310-0008			9501-1593-009	2913-6018	9043-1523-006
2310-0009			9301-1063-009	2913-6020	
2311-0008			9401-1083-109	2913-6030	
2311-0009	2005-1551-002	2902-6071	9401-1083-109	2913-6032	9043-1523-004

SOLITRON TO AEP (Continued)

S/M	AEP	S/M	AEP	S/M	AEP
2913-6056	9043-1533-003	2933-6049	9441-1583-010	2950-6333	9208-1113-002
2915-6001	9443-1563-010	2941-6001	9230-1553-004	2950-6336	9308-1113-001
2917-6007	9243-1553-004	2942-6020	9030-1023-003	2950-6337	9308-1113-003
2920-6004	9202-1553-001	2942-6024	9230-1553-003	2950-6416	9176-1213-000
2920-6017	9002-1533-001	2942-6034	9453-1583-009	2950-6483	9176-1113-000
2921-6002	9402-1083-010	2942-6045	9453-1583-010	2950-6521	9107-1113-000
2921-6003	9102-1573-001	2942-6073	9530-1593-009	2950-6597	9107-1213-000
2921-6004	9102-1573-006	2943-6040	9130-1573-001	2950-6720	9044-9513-000
2921-6005	9102-1573-003	2943-6041	9130-1573-006	2950-6731	9504-9113-009
	9102-1573-004		9130-1573-003	2950-6769	9045-9513-000
2921-6007	9102-1573-002		9130-1573-004	2950-6780	9048-9513-000
2921-6901	9002-1023-008		9130-1573-002	2950-6781	9508-9113-001
	9002-1023-003		9030-1023-001		9049-9513-000
	9002-1023-002		9230-1553-001		9062-9513-000
	9002-1023-005		9030-1023-008	2950-6920	9080-9513-000
	9002-1023-001		9030-1023-003		9081-9513-000
	9402-1083-009		9030-1023-002	2951-6030	9068-9513-000
	9530-1593-009		9030-1023-005	2951-6104	9007-1113-000
	9530-1593-010		9030-1023-001		9079-9513-000
	9002-1533-003		9530-1593-010		9074-9513-000
	9202-1553-003		9453-1083-010		9407-1113-000
	9202-1553-004		9453-1583-010		9044-9513-001
	9131-1573-001		9609-1513-000		9062-9513-001
	9131-1573-003		9204-1213-003		9079-9513-001
	9131-1573-004		9108-1213-000		9576-9113-003
	9131-1573-006		9108-1113-000		9507-9113-005
	9131-1573-002		9104-1213-000		9080-9513-001
	9231-1553-001		9104-1113-000		9045-9513-001
	9231-1553-003		9004-1113-000		9109-1113-000
	9031-1023-008		9408-1113-000		9109-1213-000
	9031-1023-003		9204-1213-002		9009-1113-000
	9031-1023-002		9204-1213-001		9009-1213-000
	9031-1023-005		9404-1113-000		9046-9513-000
	9031-1023-001		9304-1113-013		9051-9513-000
	9431-1083-009		9304-1113-004		9050-9513-000
	9441-1083-009		9476-1113-000		9455-1113-000
	9441-1583-009		9408-1113-002		9055-1213-000
	9531-1593-009		9204-1113-003		9055-1113-000
	9231-1553-004		9204-1113-001		9409-1113-000
	9431-1583-009		9008-1113-000		9155-1113-000
	9441-1083-010		9204-1113-002		9155-1213-000
	9431-1083-010		9076-1113-000		9046-9513-001
	9531-1593-010		9208-1113-000		
2933-6041	9431-1583-010	2950-6332	9208-1113-001	2955-6308	9047-9513-000

SOLITRON TO AEP (Continued)

2960-6001	2982-6001	2994-6001 5919-1503-000
2961-6605	2982-6003	2994-6007
2970-6003	2982-6004	2994-6026 5919-1503-003
2970-6042	2983-6001	2995-6001 5903-1503-000
2971-6013	2983-6003	2996-6001 5905-1503-000
2975-6001	2983-6004	2997-6003 5916-1103-603
2975-6002	2985-6004	066-29-010 920-69
2975-6093	2985-6016	066-29-016920-55
2980-6001	2986-6001	066-29-018 920-56
2980-6003	2986-6009	6505-6002
2980-6004	2990-6005 5909-1103-000	6505-6003
2981-6001	2992-6001	6505-6006
2981-6003	2993-6001	6545-6003
2981-6004	2993-6005 5919-1503-001	
2301 0004	2000 0000	

The AEP part numbers shown below are shown for gold plated connectors, except for SMA hermetic seal launchers which has passivated finish standard. Part numbers for alternate finishes (passivated or nickel) are shown on the page given for the gold plated connector.

Part numbers ending in -0XX indicate that all dash numbers for the model number shown appear on the same page.

Assembly procedure (AP) and cable trim code (TC) references are shown for all cable connectors. See page 143 for trim codes; assembly procedures start on page 144.

P/N I	PG	AP	тс	P/N	PG	AP	тс
1001-1541-009	75	.J	.113	1106-1521-0XX	.76	C	.4
1001-1541-010	75	.J	.112	1109-1511-000	.79		
1001-1551-0XX	75	.A	.1	1110-1511-000	.79		
1001-1571-0XX	75	.E	.2	1141-1521-0XX	.75	C	.4
1002-1541-009	74	.J	.113	1484-1511-000	.79		
1002-1541-010	74	.J	.112	1486-1511-000	.79		
1002-1551-0XX	74	.A	.1	1488-1511-000	.79		
1002-1571-0XX	74	.E	.2	1490-1511-000			
1003-1541-009	76	.J	.113	1701-1551-0XX	.116	A	.5
1003-1541-010	76	.J	.112	1701-1571-0XX			
1003-1551-0XX	76	.A	.1	1702-1551-0XX			
1003-1571-0XX	76	.E	.2	1702-1571-0XX			
1004-1511-000	77			1703-1551-0XX			
1005-1541-009				1703-1571-0XX	.116	E	.6
1005-1541-010				1704-1511-000			
1005-1551-0XX				1705-1551-0XX		B	.7
1006-1541-009	76	.L	.120	1709-1511-000	.117		
1006-1541-010				1710-1511-000			
1006-1551-0XX		.B	.3	1715-1521-0XX		C	.8
1009-1511-000	78			1719-1511-000	.117		
1010-1511-000	78			1736-1511-075			
1010-1511-001	78			2001-1541-009			
1012-1511-000	77			2001-1541-010			
1017-1511-000	77			2001-1551-0XX			
1019-1511-000	77			2001-1571-0XX			-
1025-1511-000	78			2002-1541-009			
1029-1211-0XX8	30			2002-1541-010			
1036-1511-051	32			2002-1551-0XX			
1037-1511-051				2002-1571-0XX			
1041-1541-009				2003-1541-009			
1041-1541-010				2003-1541-010			
1041-1551-0XX		.B	.3	2003-1551-0XX			
1042-1511-000				2003-1571-0XX		E	.2
1092-1511-0XX8				2004-1511-000			
1105-1521-0XX	74	.C	.4	2005-1541-009	.63	L	.120

P/N	PG	AP	TC	P/N	PG	AP	тс
2005-1541-010	63		120	2710-1511-000	122		
2005-1551-0XX				2715-1521-0XX		C	8
2006-1541-009				2719-1511-000			
2006-1541-010				2725-1511-000			
2006-1551-0XX				2736-1511-075			
2009-1511-000				2776-1511-000			
2010-1511-000	69			3001-1541-009	85	J	113
2010-1511-002	69			3001-1541-010	85	J	112
2012-1511-000				3001-1551-0XX	85	A	1
2014-1511-000	67			3001-1571-0XX	85	E	2
2017-1511-000	68			3002-1541-009	83	J	113
2019-1511-000	67			3002-1541-010	83	J	112
2025-1511-000	69			3002-1551-0XX	83	A	1
2028-1541-009	64	J	113	3002-1571-0XX			
2028-1541-010	64	J	112	3003-1541-009	86	J	113
2028-1551-0XX	64	A	1	3003-1541-010	86	J	112
2028-1571-0XX	64	E	2	3003-1541-509	93	J	113
2029-1211-0XX	71			3003-1541-510	93	J	112
2036-1511-051	73			3003-1541-609	93	J	113
2037-1511-051				3003-1541-610	93	J	112
2041-1541-009	65	L	120	3003-1541-709	93	J	113
2041-1541-010	65	L	120	3003-1541-710	93	J	112
2041-1551-0XX	65	B	3	3003-1551-0XX	86	A	1
2042-1511-000	69			3003-1551-5XX	93	A	1
2048-1511-000	68			3003-1551-6XX	93	A	1
2092-1511-0XX	71			3003-1551-7XX	93	A	1
2097-1511-000				3003-1571-0XX			
2105-1521-0XX				3003-1571-5XX			
2106-1521-0XX		C	4	3003-1571-6XX			
2109-1511-000				3003-1571-7XX		E	2
2110-1511-000				3004-1511-000			
2141-1521-0XX		C	4	3004-1511-500			
2484-1511-000				3004-1511-600			
2486-1511-000				3004-1511-700			
2488-1511-000				3005-1541-009			
2490-1511-000				3005-1541-010			
2701-1551-0XX				3005-1551-0XX			
2701-1571-0XX				3006-1541-0XX			
2702-1551-0XX				3006-1541-5XX			
2702-1571-0XX				3006-1541-6XX			
2703-1551-0XX				3006-1541-7XX			
2703-1571-0XX		E	6	3006-1551-0XX			
2704-1511-000			7	3006-1551-5XX			
2705-1551-0XX		B	/	3006-1551-6XX			
2709-1511-001	122			3006-1551-7XX	94	B	3

P/N	PG AP	тс	P/N	PG	AP	TC
3009-1511-000	89		3106-1521-5XX		C	4
3010-1511-000	89		3106-1521-6XX.		C	4
3010-1511-003	89		3106-1521-7XX.		C	4
3012-1511-000	87		3109-1511-000			
3014-1511-000	87		3109-1511-500	97		
3014-1511-500	95		3109-1511-600	97		
3014-1511-600	95		3109-1511-700	97		
3014-1511-700			3110-1511-000			
3017-1511-000			3110-1511-500 .			
3017-1511-500			3110-1511-600 .			
3017-1511-600			3110-1511-700 .			
3017-1511-700			3141-1521-0XX.		0	Δ
3019-1511-000			4000-1041-0XX			
3019-1511-500			4000-1041-0XX.			
3019-1511-600			4000-1031-0XX.			
3019-1511-700			4000-1071-0XX.			
3025-1511-000			4501-1041-009			
3025-1511-005			4501-1041-010 .			
3028-1541-009		110	4501-1041-010 .			
3028-1541-010			4501-1071-0XX.			
3028-1541-509			4501-9543-009			124
3028-1541-510			4501-9543-010 .			.123
3028-1541-609			4502-1041-0XX.			114
3028-1541-610			4502-1041-0XX. 4502-1051-0XX.			114
3028-1541-709			4502-1051-0XX.			22
					E	22
3028-1541-710			5002-1501-000 .			
3028-1551-0XX			5003-1501-000 .			
3028-1551-5XX			5004-1501-000 .			
3028-1551-6XX			5005-1501-000 .			
3028-1551-7XX			5006-1501-000 .			
3028-1571-0XX			5007-1501-000 .			
3028-1571-5XX			5008-1501-000 .			
3028-1571-6XX			5009-1501-000 .			
3028-1571-7XX			5011-1503-000 .			
3041-1541-0XX			5102-1501-000 .			
3041-1551-0XX		3	5103-1501-000 .			
3042-1511-000			5104-1501-000 .			
3042-1511-006			5105-1501-000 .			
3048-1511-000	38		5106-1501-000 .			
3048-1511-500	96		5107-1501-000 .			
3048-1511-600	96		5108-1501-000 .	130		
3048-1511-700	96		5109-1501-000 .	130		
3097-1511-000	88		5110-1501-000 .			
3105-1521-0XX	83 C	4	5111-1501-000 .	130		
3106-1521-0XX	86 C	4	5112-1501-000 .	130		

P/N PG AP TC	P/N PG AP	TC
5113-1501-000 130	5516-1501-000 128	
5114-1501-000 130	5517-1501-000	
5115-1501-000 130	5602-1501-000 129	
5116-1501-000 130	5603-1501-000 129	
5117-1501-000 130	5604-1501-000 129	
5207-1501-000 73	5605-1501-000 129	
5208-1501-000 73	5606-1501-000 129	
5213-1501-000 72	5607-1501-000 129	
5215-1501-000 72	5608-1501-000 129	
5216-1501-000 72	5609-1501-000 129	
5222-1501-000 72	5610-1501-000 129	
5252-1501-000 90	5611-1501-000 129	
5252-1501-500 96	5612-1501-000 129	
5252-1501-600 96	5613-1501-000 129	
5252-1501-700 96	5614-1501-000 129	
5302-1501-000 130	5615-1501-000 129	
5303-1501-000 130	5616-1501-000 129	
3304-1501-000	5617-1501-000 129	
305-1501-000 130	5707-1501-000	
306-1501-000 130	5715-1501-000	
307-1501-000 130	5722-1501-000	
308-1501-000	5725-1501-000	
309-1501-000 130	5727-1501-000	
5402-1501-000 128	5732-1501-000	
403-1501-000 128	5807-1501-000 82	
404-1501-000	5808-1501-000 82	
6405-1501-000	5813-1501-000 81	
406-1501-000	5814-1501-000	
407-1501-000 128	5815-1501-000	
408-1501-000	5816-1501-000 81	
6409-1501-000	5822-1501-000 81	
5502-1501-000	5830-1501-000	
5503-1501-000	5831-1501-000	
5504-1501-000	5832-1501-000	
5505-1501-000	5903-1503-000 58	
5506-1501-000	5905-1503-000 58	
5507-1501-000	5909-1103-000 56	
5508-1501-000	5916-1103-603 56	
5509-1501-000	5917-1103-000	
5510-1501-000	5918-1103-000	
5511-1501-000	5919-1503-000 57	
5512-1501-000	5919-1503-001 57	
5513-1501-000	5919-1503-003 57	
5514-1501-000	6000-1041-009 134 J	.110
5515-1501-000	6000-1041-010 134 J	

P/N	PG	AP	TC	P/N	PG	AP	TC
6000-1051-0XX	134	Α.	13	7202-1542-021	100	0	105
6000-1071-0XX				7202-1572-0XX			
6001-1041-009				7203-1541-010			
6001-1041-010				7203-1541-021			
6001-1051-0XX				7203-1571-0XX			
6001-1071-0XX			· · · · · · · · · · · ·	7204-1511-000			
6002-1041-009				7209-1511-000			
6002-1041-010				7210-1511-000			
6002-1051-0XX				7212-1511-000			
6002-1071-0XX				7217-1512-000			
6500-1041-009				7219-1511-000			
6500-1041-010				7222-1501-000			
6500-1051-0XX				7225-1512-000			
6500-1071-0XX				7302-1542-010		Q	125
6501-1041-009				7302-1542-021			
6501-1041-010				7302-1572-0XX			
6501-1051-0XX				7305-1521-0XX			
6501-1071-0XX				7305-1561-0XX			
6502-1041-009				7317-1512-000			
6502-1041-010				7325-1512-000			
6502-1051-0XX				7342-1511-000			
6502-1071-0XX				7405-1521-0XX		C	25
7002-1541-010				7405-1561-0XX			
7002-1541-021				7406-1521-0XX			
7002-1571-0XX				7406-1561-0XX			
7003-1542-010				7410-1511-000			
7003-1542-021				7498-1513-000			
7003-1572-0XX				7499-1513-000			
7004-1512-000				8020-1541-009			113
7009-1512-000				8020-1541-010			
7010-1512-000				8020-1551-0XX			
7012-1512-000				8020-1571-0XX			
7017-1511-000				8021-1041-009			
7022-1502-000				8021-1041-010			
7025-1511-000				8021-1051-0XX			
7042-1511-000				8021-1071-0XX			
7098-1513-000				8044-1541-0XX			
7099-1513-000				8044-1551-0XX			
7105-1521-0XX		C	25	8045-1541-0XX			
7105-1521-0XX				8045-1551-0XX			
106-1522-0XX				8046-1541-009			
7106-1522-0XX 7106-1562-0XX				8046-1541-010			
7110-1512-000				8046-1551-0XX			
7110-1512-000 7119-1512-000				8144-1521-0XX			
		Q		8145-1521-0XX			

P/N PG AP TC	P/N PG AP TC
3146-1521-0XX126F27	9076-1213-000 23
9001-1023-0XX18F14	9079-9513-000 46
9001-1033-0XX18G14	9079-9513-001
9002-1023-0XX20F14	9080-9513-000 46
9002-1033-0XX	9080-9513-001 48
9003-1213-0XX36	9081-9513-000 50
9004-1113-000	9101-1573-0XX18E15
9004-1213-000	9102-1573-0XX20E15
9007-1113-000	9104-1113-000
9007-1213-000	9104-1213-000 25
9008-1113-000	9107-1113-000 25
9008-1213-000	9107-1213-000 25
9009-1113-000	9108-1113-000 25
9009-1213-000	9108-1213-000 25
9013-1113-000	9109-1113-000 31
9030-1023-0XX21F17	9109-1213-000
0030-1033-0XX21	9114-1113-000 28
9031-1023-0XX22F14	9117-1113-000 28
031-1033-0XX22	9118-1113-000 28
033-1113-000 34	9124-1513-000 27
033-1213-000 34	9126-1513-000 27
0034-1213-0XX36	9130-1573-0XX21E15
035-1213-0XX36	9131-1573-0XX22E15
9043-1523-0XX19	9133-1113-000 34
9043-1533-0XX19D10	9133-1213-000
0044-9513-000	9139-1113-000 34
9044-9513-001 48	9139-1213-000 34
0045-9513-000 46	9144-9513-000
045-9513-001	9144-9513-001
046-9513-000	9145-9513-000
046-9513-001 49	9145-9513-000
047-9513-000	9146-9513-000 47
9047-9513-001	9146-9513-001 49
0048-9513-000 50	9147-9513-000 47
9049-9513-000 50	9147-9513-001 49
0050-9513-000 51	9148-9513-000 50
0051-9513-000 51	9149-9513-000 50
055-1113-000 30	9150-9513-000
0055-1213-000 30	9151-9513-000 51
0056-1113-000	9154-1513-000
9062-9513-000	9155-1113-000
9062-9513-001 49	9155-1213-000
9068-9513-000 51	9162-9513-000
9074-9513-000 50	9162-9513-001 49
9076-1113-000 23	9163-1113-000 28

P/N PG AP TC	P/N PG AP TC
9168-9513-000 51	9308-1113-001
9174-9513-000 50	9308-1113-003 29
9176-1113-000	9344-9513-000
9176-1213-000 25	9344-9513-001
9179-9513-000	9345-9513-000
9179-9513-001 48	9345-9513-001
9180-9513-000	9346-9513-000
9180-9513-001 48	9346-9513-001 49
9181-9513-000 50	9347-9513-000
9201-1553-0XX18A16	9347-9513-001
9202-1553-0XX20A16	9348-9513-000 50
9204-1113-0XX26	9349-9513-000 50
9204-1213-0XX26	9350-9513-000
9208-1113-0XX26	9351-9513-000
9208-1213-0XX26	9362-9513-000
9230-1553-0XX21A16	9362-9513-000
9231-1553-0XX22A16	9368-9513-000
9243-1553-0XX19B18	9374-9513-000 50
9244-9513-000	9374-9513-000
9244-9513-001	9376-1113-002
9245-9513-000	9379-9513-000
9245-9513-001 48	9379-9513-001
9246-9513-000	9380-9513-000
9246-9513-001	9380-9513-001
9247-9513-000,47	9381-9513-000
9247-9513-001	9401-1083-010
9248-9513-000	9401-1083-109 13
9249-9513-000	9401-1083-210
9250-9513-000	9401-1583-010 13
9251-9513-000 51	9401-1583-109 13 M
9262-9513-000	9402-1083-009 15
9262-9513-001	9402-1083-010 15
9268-9513-000 51	9402-1583-009 15 M
9274-9513-000 50	9402-1583-010 15 M
9279-9513-000	9404-1113-000
9279-9513-001	9407-1113-000 24
9280-9513-000 46	9408-1113-000 24
9280-9513-001 48	9408-1113-002
9281-9513-000 50	9409-1113-000
9301-1063-009 12	9412-1113-000
9301-1063-109 12 N	9413-1113-000
9304-1113-013	9422-1113-000
9304-1113-014	9424-1513-000 27
9307-1113-001	9425-1513-000 27
9307-1113-002 29	9431-1083-009 17

P/N	PG	AP	TC	P/N	PG	AP
9431-1083-010	17	Н	101	9543-1593-010	14	L
9431-1583-009				9576-9113-001	. ,52	
9431-1583-010	17	M	122	9576-9113-002	52	
9432-1113-000	32			9576-9113-003	54	
9433-1113-000	34			9576-9113-004	54	
9441-1083-009	17	H	101	9609-1513-000	32	
9441-1083-010	17	H	101	9610-1213-0XX	36	
9441-1583-009	17	M	122	9613-1523-0XX	21	C.
9441-1583-010	17	M	122	9613-1563-0XX.	16	K .
9443-1563-009	14	K	104	9620-9003-151	58	
9443-1563-010	14	K	104	9646-1513-000	35	
9453-1083-009	16	H	101	9647-1513-000	35	
9453-1083-010	16	H	101	9649-1113-000	35	
9453-1583-009	16	M	122	9650-1113-000	35	
9453-1583-010	16	M	122	907-111-1	47	
9454-1513-000	31			907-111-2	51	
9455-1113-000				907-111-5		
9456-1113-002	33			920-55	47	
9476-1113-000	24			920-56		
9501-1593-0XX	13	J	103	920-69		
9502-1593-0XX				920-82		
9504-9113-009	54			920-92	55	
9504-9113-031						
9504-9113-034						
9504-9113-035						
9507-9113-003						
9507-9113-004						
9507-9113-005						
9507-9113-006						
9508-9113-001						
9508-9113-002						
9508-9113-003						
9508-9113-011						
9513-9113-008						
9513-9113-009						
9513-9113-012						
9513-9113-013						
9530-1593-0XX			103			
9533-9113-001			100			
9533-9113-002						
9533-9113-003						
9533-9113-004						
9543-1593-009		1	106			
3345-1333-003	14		100			

TC104

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ORDERING INFORMATION

Orders:

Orders should be placed directly with the factory and are subject to the terms and conditions appearing on the reverse side of the acknowledgement.

All cancellations, terminations or changes of acknowledged orders must be in writing and have written approval from Applied Engineering Products.

Returns:

Any returns must be authorized by and are subject to inspection by Applied Engineering Products. Excess or unused material must be returned within 90 days of shipment. Returns and cancellations are subject to charges determined by Applied Engineering Products in each case. All claims for shortages must be made within 30 days of shipment.

Warranty:

We warrant our parts to be free of defects in material and workmanship under normal conditions. If any parts are found to be defective within one year of shipment, we will repair or replace them at our option. This warranty does not apply to parts which have been abused, modified, disassembled, or subjected to conditions exceeding our specifications. We will not under any circumstances be liable for consequential or incidental damages or installation labor. There are no warranties, expressed or implied, which extend beyond the description on the face hereof; in particular there is NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. No representative is authorized to assume any other liability on our behalf.

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